THE MEDICAL JOURNAL OF AUSTRALIA.

Vol. II.—2ND YEAR. SYDNEY, DECEMBER 11, 1915. No. 24.

FOUL AIR MALAISE.[1]

By **A. E. Taylor, M.A., M.B., B.C. (Cantab.),**
Health Officer, Dandenong, Victoria.

The subject of this address has little application in general practice; but perhaps a subject so much out of the general run may not be an unwelcome change. Besides, at a time when the use of suffocating and poisonous gases by our enemies is exciting our indignation and horror, it is probable that the debate to follow may bring forward some useful suggestions for the amelioration of the distressing effects of suffocating gases.

For 10 years I was in practice in a large colliery district in Gippsland, and became much interested in the effects of mine gases. In the course of my observations I came across an illness which I consider to be due to the inhalation of deleterious gases, and to which I have given the name "foul air malaise." As far as I am aware, it is undescribed.

A mine is one of the most difficult, perhaps the most difficult, of places to ventilate; this fact is well recognized by the Government, which has passed regulations and appointed inspectors for its efficient practice. In a mine of any extent the amount of air that has to be moved, and kept moving, is enormous; the windings which the air must be forced to follow are most intricate, and the capacity the air has for taking short cuts back, instead of following the paths it should be forced to take, shows a perversity almost human. In places, and for short periods, the air becomes absolutely stagnant, and gaseous exchange takes place entirely by diffusion. These places are known as "dead ends." Unfortunately they always occur in the furthest workings, just where the current of air is at its feeblest and the air itself is at its foulest and hottest. It is amongst men working in the dead ends that foul air malaise is apt to occur.

I shall bring forward evidence that foul air malaise is caused by deleterious gas of undetermined nature, and therefore it is necessary to run over the various deleterious constituents of mine air, and contrast their effects with that of the hypothetical gas causing foul air malaise.

1. The most dangerous constituent of coal mine air is marsh gas, CH_4; it is apt to give rise to disastrous explosions, and nearly all the terrible coal-mine explosions are initiated by the ignition of this gas. It does not occur in Victorian coal mines, and as far as is known, it does not behave as a poison; unless it is this gas which gives rise to that peculiar condition, "miners' nystagmus." To the best of my knowledge and belief, miners' nystagmus occurs only in mines when marsh gas occurs—it is absent in Victorian coal mines.

2. Deficiency of oxygen. Not only do the miners' lights consume the oxygen and load the air with carbon dioxide, and the miners themselves do the same thing, but a process of slow combustion is always going on. The refuse is always present, and in undesirable quantities, and even the old timbers, if at all wet, are slowly oxidized; slow though the process might appear, it is surprising how quickly all the oxygen will disappear from any part of the mine which becomes shut off. Deficiency of oxygen is not actually poisonous, but it is undoubtedly deleterious.

3. Carbon dioxide gas, CO_2. Physiological experiment has shown that this gas is not poisonous in itself, if the correct proportion of 1 in 5 of oxygen is mixed with it. It is the deficiency of oxygen that is harmful. The carbon dioxide merely serves to stimulate respiration. A toxic concentration of CO_2 can be obtained, but not under working conditions. The presence of CO_2 is, however, significant, for it is formed by the consumption of the O., and the percentage of CO_2 forms a rough and inaccurate measure of the deficiency of O.

4. Carbon monoxide, CO. This is one of the most poisonous and the most dangerous of gases met with in mines. It is deadly and dangerous for a variety of reasons:—

(*a*) It is very difficult to detect.
(*b*) A minute quantity is fatal.
(*c*) The first warning of danger and death are separated by a very short interval, or, indeed, there may be no interval.
(*d*) It may occur in any mine, and at any time, as a result of a small unnoticed fire.

5. Sulphuretted hydrogen: H_2S. This occurs from the putrefaction of organic refuse, *e.g.*, the discarded remains of the miner's dinner. Even in small quantities it is apt to prove rapidly fatal. The chemistry of hæmoglobin and its interaction with O, CO, H_2S, and so on, are adequately treated of in numerous textbooks, and must not detain us here. Poisoning by H_2S, as by CO, is apt to be followed by temporary or even permanent insanity. On one of two occasions I have had to treat miners for severe headache and nausea, after having worked in a place where was an extremely offensive smell; but they were always too ill to return with a bottle of water and get me a specimen of air for analysis. I am therefore not in a position to say if H_2S was present in the air in these cases, but I suspect that it was.

6. Nitro-compounds. Mining nowadays is largely carried on by means of explosives. Black powder is often used, but various nitro explosives, as a rule gelignite, melinite, rack-a-rock, and so on. When these explode properly they give rise to harmless gases, CO_2, N, etc.; but occasionally they do not explode properly. They explode partially, and for the rest they burn away. In these circumstances some extremely poisonous gases are formed. They are recognized instantly by the smell by experienced miners, and are greatly dreaded. When these

[1] Read at a Meeting of the Victorian Branch of the British Medical Association on September 1, 1915.

gases are respired nothing happens immediately; generally there is an interval, during which the man feels all right, for half an hour or so. He then has an attack of acute suffocation, froth, often blood-stained froth, pours from the lungs and out of the mouth. If the patient does not expire at once, he may have a relapse an hour or more later, or he may be fortunate enough to survive. If he does, the epithelium of his lungs is permanently damaged, and he is always subject to acute and intractable bronchitis from slight causes. Fortunately, I have never been called on to treat one of these awful cases in their acute stage; but several of my patients had been gassed, as they term it, with nitro-compounds, and were continually under my care for bronchitis.

7. Unknown gases. Now, I come to a doubtful matter. The illness I am about to describe must be due to some deleterious condition of the air—the foregoing would therefore seem to exclude any of the known deleterious agents. It would, therefore, follow that this illness is due to undetermined bodies.

I have analysed specimens of the foul air which has given rise to this illness, and have found deficiency of oxygen, excess of carbon dioxide, both well within the legal limits, an undetermined proportion of smoke, no carbon monoxide, no sulphuretted hydrogen, and no other gaseous bodies, which were within the limits of my analytical capacity to detect.

Of course the objection may be raised that deficiency of oxygen, excess of carbon dioxide, or the combination of these, together with heat, water vapour saturation, and absence of air convection currents may give rise to illness. I am far from denying it, but contend that the illness produced by these factors is not the illness of which I am speaking. Such a combination occurs in caisson work, for instance, and the condition of men working in caissons has often been the subject of enquiry by acknowledged experts. It is hardly conceivable that such a condition should exist and have been overlooked by them. As for smoke, the conditions in the moist smoky workings cannot approach those of the underground railway in London, as it used to be between Gower Street, Portland Road, and Baker Street. I made careful enquiries amongst the porters, guards, and drivers in these places, and was assured that no such illnesses existed.

Definition.—I call this malady *foul air malaise.*

Aetiology.—The condition occurs only amongst a proportion of those working in the foulest air and in the so-called dead-ends.

Symptoms.—(*a*) The most striking symptom is a totally unexpected one, viz., acute and intractable dyspepsia, with a moderate amount of flatulence and gastric tenderness. Whatever other of the usual symptoms of foul air malaise may be absent, this one is almost universally present. None of the usual remedies suffice to relieve it. Neither dieting, attention to the teeth (miners frequently, but by no means invariably, have bad teeth), stomachics, aperients, bismuth, pepsin, nor anything else, save and except removal from the foul air, is of use. On removal the recovery of the patient is striking and prompt; and on return to work in the foul air the relapse of dyspepsia is equally prompt.

(*b*) The next most striking symptom is anæmia of a peculiar kind. It is so similar to that of lead-poisoning that for a considerable time I could not persuade myself that these cases were not cases of plumbism, the origin of which I had been unable to discover. I held this opinion in the absence of a lead line, lead colic, extensor paralysis, or history of contact with lead. Close study, however, forced me to give it up. I regret that I cannot give the actual figures of the percentages of hæmoglobin, but must be content to state that the anæmia was well marked.

(*c*) Other symptoms sink into insignificance beside these two; the majority of the patients, however, suffered from several of the following: Marked weakness, insomnia, anorexia, nausea, and vomiting, irritability, and malaise. The urine was unaffected.

Prognosis.—This is good. Removal to good air is promptly followed by recovery of digestion, disappearance of the symptoms of digestive disturbance, and recovery from anæmia and from the other symptoms. Even removal to less foul air is followed by improvement.

Prophylaxis.—It is difficult to see how the ventilation of mines could be improved on. The Government regulations are strict, the inspectors are watchful, and the mine managers prompt in carrying out all the regulations. It pays them to be so.

It is curious that just as certain men are more subject to divers' paralysis, viz., fat men, because fat dissolves nitrogen more readily than any of the other tissues of the body, there is a class of men less subject to foul air poisoning than others. Chronic alcoholics are less easily and less profoundly affected by foul air than are the temperate. I suppose it must be a case of acquired toleration.

Diagnosis. The disease has to be distinguished from lead-poisoning. This question has already been dealt with. The differentiation from gastritis due to bad teeth is not difficult. If there are bad teeth, they must be seen to; but if the patient has foul air malaise this measure will prove ineffective. The disease must also be distinguished from chronic alcoholism, persistent improper feeding, and secondary anæmias of various kinds.

To those acquainted with the disease, the diagnosis is easy: the peculiar anæmic impresses one at the first glance, and an enquiry as to a history of working in lead, and the conditions of the working place in the mine immediately follows.

What will bring the patient to the doctor is, first, persistent indigestion, and, secondly, weakness.

Treatment.—The treatment is simple, effective and prompt. Removal of the man to the open air will effect complete cure, not only in regard to the symptoms, but in three or four days in regard to the anæmia as well.

Summary.

I put forward the thesis:—

1 There is an ailment with a definite ætiology, symptomology, and course, to which I have given the name "Foul air malaise."

2. I maintain that this illness is caused by undetermined poisonous constituents in coal-mine air.

3. I maintain that it is not caused by deficiency of O, excess of CO_2, heat, water-vapour saturation, absence of air convection currents, or a combination of them. It is not caused by smoke, CO, or H_2S.

4. Since it is not caused by them, it must be caused by something else, and I can conceive of no other probable explanation than that of some "unknown poisonous gas."

SOME CASES OF MENINGOCOCCUS INFECTION.[1]

By **R. O. Douglas, M.S.,**
Surgeon to the Bendigo Hospital.
(Continued from page 534.)

The findings in the cerebro-spinal fluid are all important in diagnosis. Only the most elementary laboratory examination of the fluid has been done, and often the notes are quite incomplete. I will now read the notes of the cases as they appear in the history book:—

Case A.—The illness was developed in the ward. Lumbar puncture 24 hours from onset; 30 c.cm. of turbid fluid, not under increased pressure. Millions of diplococci, and a few cells. Never any change in reflexes till death in coma 72 hours from first rise of temperature. The patient was an advanced tabetic.

Case B.—Received 4 hours after onset. Intense delirium. Lumbar puncture, 20 c.cm. turbid fluid; no increased pressure. Many pus cells, a few cocci, mostly extra cellular. Kernig's and head retraction absent on admission, but well marked after 54 hours. No record of onset. Recovery.

Case C.—Received 4 hours after onset. Evening delirium, later coma. Lumbar puncture, 20 c.cm.; markedly increased pressure; fluid very turbid; many meningococci. It set solid on standing. Kernig's sign and head retraction absent on admission; both present 12 hours after. Death on fourth day.

Case D.—Five hours after onset. Moribund on admission; already passed through maniacal stage into coma. Lumbar puncture, 20 c.cm. of turbid fluid; many pus cells, crowded with both extra- and intra-cellular cocci. On standing in a test tube, 10 millimetres of sediment in 8 cm. of fluid. Kernig's sign and head retraction absent. Respiratory failure; artificial respiration. Second lumbar puncture, 40 c.cm. aspirated; no result. Death.

Case E.—Six hours after onset. Intense delirium. Lumbar puncture, 25 c.cm. of clear fluid; many leucocytes, no meningococci. The films were not well stained. Next day, many meningococci present. Two days later 1.5 cm. of greenish pus sedimented from 9 cm. of fluid in test tube. In the next sample nearly 2.5 cm. of pus. Kernig's sign absent on admission; present after 24 hours. Head retraction absent at first, but present after 36 hours. Recovery.

Case F.—Six hours after onset. Very delirious after four hours. Deeply unconscious on admission. Lumbar puncture, 25 c.cm. of clear fluid under increased pressure; an occasional pus cell, a few scattered extra-cellular diplococci. Kernig's sign well marked on right side, absent on left. No head retraction. Reflexes normal. Kernig's sign and head retraction marked later. Still very ill.

Case G.—Eight hours after onset. Comatose. Lumbar puncture, 5.5 c.cm. of clear fluid, no increased pressure; pus cells and a few cocci. Kernig's sign and head retraction absent at first; later, Kernig's sign present. Death in relapse.

Case H.—Twelve hours after onset. Drowsy. Lumbar puncture, 25 c.cm. clear fluid squirted out; a few pus cells and a small number of intra-cellular diplococci. Kernig's sign and head retraction absent at first; Kernig's sign present after 30 hours, and head retraction after 18 hours; later, both very intense. The patient is now convalescent, after a febrile course of nearly two months' duration.

Case I.—Twelve hours after onset. Gradual development of delirium. Lumbar puncture, 25 c.cm. of cloudy fluid, with a few intra-cellular and many extra-cellular diplococci. Lumbar puncture was not carried out until 50 hours after the onset. Kernig's sign appeared 36 hours after the onset, and head retraction after 44 hours. The patient is still very ill, after six weeks.

Case J.—Twelve hours after onset. Mentally confused. Lumbar puncture, 60 c.cm. cerebro-spinal fluid withdrawn; pressure not increased. Some pus cells; no diplococci discovered on prolonged search or culture. Later, the fluid assumed an intense purulent type. No head retraction; Kernig's sign absent; knee jerks normal. Later, intense and prolonged opisthotonous. The patient is now convalescent, but blind.

Case K.—Twenty-four hours after onset. Nocturnal confusion. Lumbar puncture, 20 c.cm. cloudy fluid; pressure not increased. A few diplococci, mainly intra-cellular. Head retraction was present on admission, and Kernig's sign developed after 30 hours. Serum was employed in the treatment. Convalescence became rapidly established.

Case L.—Twenty-four hours after onset. Nocturnal delirium. Lumbar puncture on the third day; cloudy fluid, many pus cells, scattered diplococci, mainly intra-cellular. The fluid was not under increased pressure. Very brisk plantar reflexes. Kernig's sign appeared 52 hours after the onset, and head retraction a little later. The patient is now convalescent.

Case M.—Twenty-four hours after onset. Low, muttering delirium. Lumbar puncture, 7c.cm. turbid fluid; many diplococci. Marked head retraction, and double Kernig's sign present. No plantar reflex. Death occurred in the third week of illness.

Case N.—Three days after the onset. Purulent conjunctivitis. Lumbar puncture, 15 c.cm. of thick, cloudy fluid; many pus cells and diplococci. Pain on flexing the head; Kernig's sign slightly developed. The patient was given serum on the fifth day, and passed into convalescence rapidly.

Case O.—Three or four days after the onset. Delirious after 48 hours. Lumbar puncture, 35 c.cm.

[1] Read at a Meeting of the Bendigo and Northern District Branch of the British Medical Association on October 15, 1915.

of very turbid fluid; profuse growth on culture medium. Kernig's sign marked; head retraction not marked. Knee jerks absent; very brisk plantar reflex. Facial paralysis. Convalescent in a week after injection of 5½ years old serum.

Case P.—Four days after the onset. Intensely delirious. Lumbar puncture, 18 c.cm. turbid fluid; diplococci present. Head retraction and Kernig's sign very marked. Plantar reflexes absent. The patient was wildly delirious for a week. He responded to 5½ years old serum, and convalescence was established rapidly.

Case Q. was admitted with a history of illness of four days' duration. There was evening delirium. Lumbar puncture; fluid very turbid and viscid, many meningococci. There is no record of the condition of the knee jerks, etc., on admission. Later, head retraction and Kernig's sign were well marked Babinski's sign was also present. The patient died in the second week of illness.

Case R.—The history of the onset was indefinite. The patient had been ill for about a week, and was sent to the hospital with the diagnosis of tubercular meningitis. She was not delirious. Lumbar puncture, 5 c.cm. of turbid fluid, not under increased pressure; scattered diplococci. Head retraction and Kernig's sign were both marked; the plantar reflexes and the knee jerks were absent. She is still under treatment.

Case S.—The patient was admitted after about a week of indefinite symptoms. Very atypical case. There was no delirium, but intense headache. Lumbar puncture, 10 c.cm. fluid under slightly increased pressure; no diplococci were seen in the smears. More lymphocytes than usual. A moderate number of colonies developed in the culture tubes. Specimens were stained for tubercle bacilli, but none were found. The patient has only one leg. Kernig's sign was present; the neck was spastic. The knee-jerks and plantar reflexes were absent. Later, the plantar reflex gave an extensor response. The patient is still very ill.

Case T.—Onset ill defined, about a week or ten days before admission. The patient was sent to hospital with the diagnosis, probably tubercular meningitis. Intense, frantic delirium had been present for several days. Lumbar puncture, 20 c.cm. of almost clear fluid; many extra-cellular diplococci. Kernig's sign was marked and head retraction slight. The patient recovered.

In every case the meningococcus was demonstrated, either in the smear, stained by Gram's method, or by culture. In only five of the cases was the fluid under increased pressure, and in two it squirted out. In seven cases it was definitely recorded in the notes to be under no increased pressure.

The microscopical findings certainly indicated that the coccus does not deserve the name of *intracellularis*. In the early cases the cocci were nearly all extra-cellular. It is with great regret that I am unable to report the study of progressive changes in the relation of cocci to cells, as it is probable that this might have been of use in prognosis. The lack of time for this work put it quite out of the question.

Whatever the condition of the fluid on the first puncture, it rapidly became cloudy and loaded with pus cells. The amount of pus present in the test tube, after standing, varied from 2.5 cm. in 9 cm. of fluid to a minute, powdery sediment. Some cases exhibited the most remarkable looking veils, hanging from the under surface of the fluid right to the bottom of the tube. The most marked veils were seen in the more chronic and serious cases. These veils were most marked in specimens from Case G.

On the other hand, the samples of fluid with the greatest amount of pus were derived from patients who recovered, although one is quite blind.

Of the other early conditions that were found, a profuse nasal discharge occurred within 48 hours of the onset in nine of the cases.

Various joints were involved within four days of the onset in eight instances. The arthritis of meningococcal infection in the present series of cases was persistently of one type. In each case the onset was with pain and marked local heat in the part. The wrist, elbow, and knee were the most frequently affected. In three cases the involvement was polyarticular. Other joints involved were the sterno-clavicular, shoulder, ankle and intertarsal joints. In each case the pain was quickly followed by marked peri-articular œdema, and in some cases a certain degree of erythema. At this stage the joint was very painful on movement, though not very tender on pressure. The tissues were remarkably easy to impress with the finger tip. It gave, as near as I can describe it, the sensation of pressing a thick, pleural exudate under the skin. This impression was especially common in the wrists. They had an appearance similar to joints affected in a gonococcal case, but were more swollen. The sensation on palpation was altogether different, being soft and "squashy." In no case was intra-articular fluid definitely demonstrated. Every case cleared up rapidly and completely within a week.

The arthritis appears to be far more a peri-articular condition than an intra-articular one, and what intra-articular trouble there is, is probably synovial. I have never seen any other joint condition resembling these even remotely, though the description given of some very mild pneumococcal joints seems to be the nearest.

Herpes labialis was very frequent. It was present in eight of our cases. It usually appeared early. In two of the cases patches were noted in other situations as well. In one the herpes was on the neck, and in the other near the umbilicus. Both these patients, as well as two of the others with herpes, died.

An acute iritis, with hypopyon in one eye and exudate into the vitreous in the other developed on the fourth day in one case. The patient is now convalescent, but totally blind.

One case started with acute meningococcal conjunctivitis 54 hours before the onset of any other symptoms.

Three cases had acute, purulent conjunctivitis, which cleared up quickly and completely.

A nurse in the ward developed acute meningococcal conjunctivitis, but the infective agent did not invade the blood stream.

In one patient, complete bilateral nerve deafness, starting on the second day and becoming complete on the fifth day, was seen. The patient died later in relapse.

One patient had almost complete facial paralysis on admission on the fourth or fifth day. It has gradually cleared up. In another, left-sided ptosis, left-sided deafness, right external strabismus, and palato-pharyngeal paralysis developed progressively and terminated in death.

In no case at any time was there any evidence of œdema of the optic disc, though the patients were examined repeatedly for this by Dr. Ker.

I propose to deal very briefly with the progress of the disease.

The most remarkable thing noticeable was the rapid change from the intense delirium and headache at the time of onset to a most optimistic state of mind. This was often the case soon after the first lumbar puncture. Nearly every patient, if asked even in the intervals of wild delirium, or when the head was so retracted that he could not lie on his back, would declare he "felt splendid," or ask to go home, or state that he would be all right if only he could get up and sit by the fire.

Only two patients complained of persistent and prolonged headache. In other cases, whenever headache and vomiting recurred, these symptoms were regarded as an indication for lumbar puncture, which almost invariably relieved the headache within a few minutes, and stopped the vomiting for some time. The later lumbar punctures were sometimes under great pressure. In some cases, the pressure of the cerebro-spinal fluid was increased to a considerable extent throughout the whole course of the illness.

Vomiting rarely persisted after the first lumbar puncture, and a recurrence was usually relieved by repetition. In one of our cases the headache and vomiting remained almost uncontrollable for weeks.

The delirium varied very greatly in its duration and its violence. In five cases it persisted till death. In one case it cleared up in 12 hours, and, returning later, persisted till death. In one case it cleared up in 36 hours, returned 14 days later, and has been present for the last five weeks. In one case it was of the low, muttering type for 12 days. The patient is still very ill. One patient had seven days of intense delirium, varying with stupor. Recovery ensued. In one case intense maniacal delirium lasted for four days; during the last three days it was constant, and resisted all sedatives. This was followed by rapid recovery. One patient had seven days' intense maniacal delirium, except in the mornings. He recovered. The delirium in three cases was intense at first, but after the first day or two the patients became quiet and clear-headed. The three cases with seven, seven and four days of maniacal delirium had the appearance of being absolutely hopeless, but all the patients made complete and uncomplicated recoveries. The temperature reached normal on the thirteenth, seventh and third days respectively. These are cases B., E. and T.

In all the cases terminating fatally, the temperature was raised up to the time of death. Two of these patients were treated with 5½ years old serum. All the cases not yet convalescent are still febrile, 31, 45, 48 and 57 days since admission to the hospital. In the cases in which recovery occurred, the temperature was raised for three days in one, for five days in one, and for seven days in two. The last three cases were treated with two injections of 15 c.cm. of serum (5½ years old). The fever lasted for four days in one patient, who had two injections of new serum, for 11 days in another patient, who was given new serum on the seventh day; for 13 days in one, for 24 days in one, and for 54 days in one.

In all cases, except one, when the temperature reached normal and was not raised for three days, convalescence set in. In one case there were recurrent rises of temperature every four days, after 35 days of continuous fever, till the fifty-fourth day. The patient had new serum on the forty-fifth day.

It reflects great credit on the nursing staff of the Isolation Ward that only one patient developed any bed sores or even got beyond an occasional erythema. The skin of the one patient was broken at the time of admission.

I do not propose to spend any time dealing with complications of the disease, as some of the complicated cases have not yet terminated, and I pass on to deal with the treatment.

If Dr. Robertson, Chairman of the Board of Public Health, has been reported correctly in the papers, he practically stated early in the epidemic that no attempt at prophylaxis was of much value, and that no treatment (presumably in the absence of serum) was of any avail, except waiting for the natural resistances of the body to combat the disease. It is impossible to believe that his words were reported correctly.

I hold most emphatically that prophylactic measures are of extreme importance and that careful, symptomatic treatment, even in the absence of serum, gives most encouraging results.

The epidemic here presented three phases. The first five patients, including three on leave from military camps, where there were already cases of meningitis, and two civilians, in both of whom contact with military had occurred, were admitted between August 9 and August 12, 1915. At this stage no precautions were taken at the hospital, beyond the isolation of patients and nurses.

The Military Camp was formed at Bendigo during this period, and Dr. Gaffney, the Medical Officer, had instituted the practice of giving nasal douches and gargles, followed by inhalation of eucalyptus oil every morning and evening, from the time the Camp was instituted. These measures were successful for about a week, when the second phase commenced. Between August 17, 1915, and August 22, 1915, six men from the Military Camp were admitted. One civilian was admitted on the 20th, and one on the 29th.

Immediately the first case from the Camp was diagnosed, both the Camp and the Hospital were

put under strict quarantine. Major Henderson, on Dr. Gaffney's advice, closed the Camp for all exit and entrance, except on essential business, a special isolation camp was formed, and all contacts were isolated at once. Everyone entering or leaving the Camp had their noses and throats thoroughly sprayed. No military leave of any kind was allowed, and this I consider was the main point in the successful stamping out of the infection in the Camp.

At the Hospital, a military guard was established, all visiting was stopped, a special out-patient department outside the quarantine lines established, and everyone entering or leaving the Hospital had to douche the nose and throat with normal saline solution, and afterwards inhale eucalyptus oil.

No more cases occurred until September 7, 1915. A few days prior to this date, the rule at the Camp concerning leave had been relaxed, and in some instances leave was granted. Two cases occurred at the Camp on September 7 and 8 respectively. More stringent prophylaxis than ever in the Camp, under Dr. Gaffney's directions, promptly stamped it out again, and it has not recurred since.

During the next ten days, four of the five remaining cases developed among the civil population. The last case occurred on October 2, 1915.

The history of the epidemic in the Camp is the strongest point in favour of energetic prophylactic measures, and the credit for their institution is solely due to Dr. Gaffney, who put up a most determined fight against infection from the start.

Holding, as I do, the firm opinion that meningitis is a complication of a meningococcal naso-pharyngitis, and that the naso-pharyngitis is very highly infective, the rationale of the prophylactic measures is evident. Prevent, if possible, all naso-pharyngitis due to the meningococcus or allied organisms by means of a mild, antiseptic toilet of the naso-pharynx, and rigid isolation of all contacts.

Skilful douching of the nose and throat with normal saline solution, or normal saline and weak peroxide is neither difficult nor unpleasant, and serves to clear away or at any rate soften any mucous exudate, so that it can be expelled on to a piece of rag, which is then burned. This is followed by inhalation of eucalyptus. The eucalyptus oil is not swallowed nor sprayed. Dr. Bull's experiments showed that eucalyptus is highly inimical to the meningococcus, and it is certainly not harmful to the nasal mucosa, if properly used. Dr. Gaffney based his treatment at the Camp on Dr. Bull's experiments, and the excellent results seem to indicate its undoubted efficacy. The rigid isolation of contacts, and thorough quarantine, combined with very early diagnoses, may, however, have been the only active factors.

Rigid isolation of all contacts is necessary, because laboratory experiments show that up to 70% of close contacts with a case of meningitis become infected with the meningococcus. If these persons are allowed to mix freely with others, the infection will spread with great speed, as every one infected will infect others. Prompt and rigid isolation will prevent this to a large extent. This is not usually practicable in civil life, but, under military conditions, it is comparatively easy.

Another very important point is to prevent as far as possible any interchange of visits between infected and uninfected areas. This is of the greatest importance, because, by visits, the trouble is spread far and wide. While the epidemic was on here, the Camp, the Hospital and the Convalescent Home were absolutely isolated from all outside contact.

All big, public functions, where people are crowded together, should be avoided, as the close crowding gives the meningococcal naso-pharyngitis a golden opportunity to spread rapidly.

Overcrowding in dwelling or barracks must be avoided as far as possible, and every effort must be made to get sunlight, or, at least, strong, diffuse light into every part of the houses, grounds, etc.

All excess, that ordinarily renders the individual prone to colds, should be most carefully avoided.

In regard to actual treatment of the meningitis, the first five of our cases, about a week after the onset, were treated with some 5½ years old serum. Three of the patients recovered rapidly, and two died. Thereafter until the last two cases, no serum was available. Both the patients treated with new serum are convalescent.

There is not the slightest doubt about the efficacy of serum. It is only necessary to inspect the temperature charts to see what a marked difference there is in the progress of the illness. In the absence of serum, the majority of the cases had to be treated symptomatically. The chief reliance was placed on lumbar puncture and morphine. Urotropin was given in 10 grain doses every four hours to adults, till hæmaturia occurred or convalescence was well established.

Lumbar puncture was rarely performed more frequently than every second day, and then only when symptoms seemed to indicate its necessity.

Morphine and veronal were the sedatives used. In the maniacal cases $^1/_{75}$ of a grain of hyoscine was given. Bromide of potassium and chloral were frequently exhibited. In spite of the large doses of sedatives needed in the three most violent cases, complete recovery ensued in each.

From the first, the patients were given as much nourishment as they could take. Thirst was usually marked, and all the patients took milk readily. Nothing under 50 ounces per diem was regarded as satisfactory, even with the addition of other things. In some cases the quantity of milk drunk each day was as much as 90 ounces or more.

In the chronic cases, potassium iodide was given in 15 grain doses, three times a day for a time. It did not seem to do any good.

Injection of meningococcus vaccine (stock) in 50 million doses was given in several chronic cases, and repeated once. Two patients appeared to become distinctly worse after it, and, consequently, no more was given. Whether the change was due to the vaccine or to some independent factor I do not know.

In regard to the technique of lumbar puncture, in no case was a general anæsthetic given, though, in the majority of cases, a little ¼% cocaine was

injected into the skin. Long, fine, extremely sharp needles were used, until the fluid became too purulent, when coarser needles were substituted. At one stage I used the special, short-pointed spinal anæsthesia needle with the stylette. I never used it before, and will never do so again. It is no wonder that the surgeon inducing spinal analgesia sometimes fails to enter the canal. The short, blunt point pushes the dura in front of it, and, while using these needles, we caused marked sensory phenomena in the lower limbs, acute pain and numbness being the two chief. These sensations were probaly due to pressure on the *cauda equina* by the yet unperforated or partially dislocated dura. With very sharp needles the puncture was usually quite painless, except the prick through the skin.

In certain cases, where blocking of the lower part of the cord was suspected, thoracic or cervical puncture was resorted to. The needle was introduced very obliquely and gently, being filled with saline solution before entry, and the open end watched for the first sign of overflow. Cervical puncture seems easier to do because the layer of tissues to penetrate is much less, though the orifice to strike is much smaller. I would never attempt any high puncture without an extremely sharp needle.

In cases in which serum was given, a quantity of cerebro-spinal fluid, greater than that of the serum to be injected, was withdrawn or allowed to escape.

In conclusion, I desire to express my indebtedness to Dr. T. E. Green for his valuable assistance and advice, more especially in the earlier stages of the epidemic, when I was called upon to deal with a disease which was practically unknown to me. Many of the ideas and observations contained in this account of the cases have been due to his teaching. I also wish to thank Dr. Ker, the Honorary Specialist to the Hospital, for his kindness. He was always ready, day or night, to render assistance, and to carry out special examinations, which the members of the staff of the hospital were unable to carry out satisfactorily.

Dr. Gaffney, who was in charge of the camp, had his hands very full, dealing with the great amount of sickness amongst the men transferred from Seymour. He was always ready to do what he could to help, and by the energetic preventive measures adopted at the Camp, he undoubtedly saved us from having a much greater number of cases to treat than we had. My sincerest thanks are due to these gentlemen.

Reports of Cases.

A UNIQUE CASE OF RUPTURE OF THE VAGINA IN THE SECOND STAGE OF LABOUR.[1]

By **Cecil S. Molesworth, M.B., Ch.M. (Syd.),**
Sydney.

M.L., æt. 30 years, seventh pregnancy. All the previous labours had been normal; no instruments had been used. The period of the present pregnancy was full-term. Labour commenced at 1 a.m. on May 27, 1915. The membranes ruptured at 11.30 a.m. The patient was attended by a nurse, who diagnosed the presentation as vertex, and position as L.O.A. *Caput succidaneum* was marked. The pains were weak, and were felt more in the abdomen than in the uterus. The pulse-rate was 90 and the temperature 99° F. The nurse stated that the fœtal pulse was about 125, but, in view of later events, it is doubtful if she heard any fœtal pulse at all. Assistance was required for "delayed labour." The patient was seen at 4.20 p.m. by Dr. Donohoe, my fellow external assistant at the Coombe Hospital, and myself. Her general condition was good. The pulse-rate was 90, and the beat was strong. The temperature was 98.6°. Her colour was good. There were no pains at all. There had been strong, bearing-down pains from 6.30 a.m. till 11.30 a.m., with intervals of ten minutes. The pains at 11.30 a.m. were much more severe than those preceding. The patient cried out and felt faint. There were irregular pains after this, till about 1 p.m., when patient said she had a bearing-down pain, and had to pull on the towel. After that the patient had general abdominal pain, not bearing-down in character, which stopped altogether at 3 p.m.

Inspection.—The patient had a pendulous abdomen. The abdomen was distended to the size of a full-term pregnancy. A smaller tumour, the size of a post-partum uterus, was seen between the symphysis pubis and umbilicus, lying in front.

Palpation.—The abdomen was soft, and the wall lax. The patient complained of tenderness all over the abdomen. A hard, oval tumour, situated below the umbilicus, felt like the uterus, but was thought to be a fibroid. The fœtal parts were palpable with remarkable distinctness, outside this hard tumour, especially to the left, and above the level of the umbilicus. A knee, leg and foot were definitely palpable. No fœtal heart heard on auscultation.

Vulva.—The labia were very œdematous, containing large varicose veins. On separating the labia, the fœtal head was visible. Examination *per vaginam* disclosed the head on the perineum. *Caput succidaneum* was present over the occiput and parietal regions. The position was found to be occipito-posterior.

I anæsthetized the patient, and the forceps were applied by Dr. Donohoe, and the head extracted. After some interval, as there was no sign of external rotation, a hand was introduced and the shoulders rotated, and then delivered manually, with a finger in the axilla. The still-born child was then extracted. The cord was cut, and the baby put on one side, after the usual routine of artificial respiration and stimulation. The hard, oval tumour, previously described, was still felt in the same position. Coils of intestine could be definitely palpated through the flabby abdominal wall, with a gurgling, splashing sensation. After an interval of 1¼ hours, the placenta had not come away, and an attempt at expression by the Dublin method was made, without success. The patient was anæsthetized again, and a gloved hand was introduced into the vagina by myself, to remove the placenta. With the hand in the vagina, the placenta was not palpable. The cord was pulled on and made tense, and then followed up by the examining hand, and the placenta was found at the level of the umbilicus, and to the left side, lying quite free and independent of the firm tumour in the abdominal cavity. By this time, of course, I was quite sure that my hand was in the abdominal cavity. The placenta was removed, and found to be complete. At the same time, the examining fingers could easily be palpated through the abdominal wall. The examining fingers were then passed up along the anterior vaginal wall, and the *cervix uteri* encountered. The cervix was found to be intact. Two fingers were introduced through the cervix, and the uterus explored and found to be normal, with no evidence of rupture. By this time the uterus was found to be identical with the tumour previously felt and thought to be a fibroid. On further examination, it was found that the vaginal wall was torn from its attachment to the uterus posteriorly, the tear extending into both lateral fornices. Through this tear, which admitted the hand, without any obstruction, a loop of small intestine was palpable, and visible on retraction of the labia and vaginal walls. The abdomen was again examined; on percussion, dulness in both flanks was detected. The patient was cleaned up, and a diaper and binder tightly applied. The patient was then brought by ambulance to the Coombe Lying-in Hospital, her general condition being so good as

[1] Read at a Meeting of the New South Wales Branch of the British Medical Association on November 26, 1915.

to justify moving her. At the time her pulse was 96 and strong and the temperature 99°. The colour was good. Obviously, she had not bled much.

According to the nurse, the condition of the abdomen, the size of the tumour, and the position of the head on the perineum did not change from when she first saw the patient at 1 p.m. until we saw her at 4.20 p.m. On considering the preceding facts, it was concluded that the body of the child and the placenta were in the abdominal cavity when we first saw the patient.

On arrival at the hospital, my statement of the preceding events was received with marked incredulity. As a matter of fact, I was called a liar! According to everybody, the uterus must be ruptured. It was fortunate that there was a qualified man with me to endorse my statements.

The patient was taken into the theatre and anæsthetized, and then examined by Dr. R. A. MacLaverty, the Master of the Coombe Hospital. He could palpate small gut through the vagina, and therefore decided to open the abdomen.

The abdomen was opened in the middle line below the umbilicus. A moderate amount of blood and meconium was found in the abdominal cavity. The uterus was found to be perfectly sound and healthy, with no sign of rupture. The vaginal wall was torn at its attachment to the uterus, posteriorly, and well round into each lateral fornix. The uterine vessels were intact. Dr. MacLaverty decided to remove the uterus. He drained the abdominal cavity through the vagina, and through the abdominal wall, and closed the abdominal wound. The patient drained very freely, and all next day seemed very comfortable and well On the second day after the operation, however, the temperature and pulse shot up, and about 8 p.m. the patient died, with all the signs of peritonitis.

And now, if it be possible, we want to find a reasonable explanation of the mechanism in this case. I discussed this case at length with several obstetricians in Dublin, and the following was the best explanation we could find:

The head being occipito-posterior in position, the second stage could not proceed as quickly as the strongly contracting uterus demanded. The uterus tilted forward, owing to the slack abdominal wall, and the posterior vaginal wall was put on the stretch. As a result, the force of the contracting uterus was all exerted on the posterior vaginal wall, which yielded under the strain, and tore at its attachment to the uterus posteriorly. This allowed the uterus to tilt further forward, and the rest of the fœtus, followed by the placenta, was born into the abdominal cavity.

I would be very grateful if anybody could throw any more light on this interesting case, which I hope you will deem worthy of discussion.

I have to acknowledge my indebtedness to Dr. R. A. MacLaverty for permission to publish this case.

Reviews.

ENCYCLOPÆDIA OF MEDICINE.

The second edition of the "Encyclopædia Medica,"[1] under the general editorship of Dr. J. W. Ballantyne, is a big undertaking, designed to fill many volumes before the letter Z has been disposed of. It is intended to fill the rôle of a work of reference for the whole realm of medicine and surgery in all its departments, and it is to be judged from that standpoint. The editorship of such a work is a matter involving great responsibility, and calling for the greatest care. An editor will always have a certain amount of unconscious bias; this has to be allowed for in all human undertakings, and the articles under various headings, contributed by many different men, will necessarily be uneven in both quality and quantity, however careful the selection of contributors. Therefore, knowing something of the difficulties to be encountered, we shall be satisfied if, on the whole, we find a high level of attainment, but we shall expect to find weaknesses and imperfections, and the critic must not look too exclusively at these. We have examined this first volume with some care, and we think it fair to say that we do find a general high level of attainment. The book will be found an excellent and most useful work of reference, containing a large number of subjects dealt with in a most able and masterly way by a collection of very competent men. A very considerable amount of success has been attained in a most difficult undertaking. This is high praise, and well deserved. We notice that a very large percentage of the contributors are Edinburgh men, and they have well sustained the reputation of the Edinburgh school. Having said this, we may indulge in some more particular criticism. We will say first, and unhesitatingly, that the fullness and importance given to the headings belonging to skin diseases is altogether out of scale with that of other headings. The articles are of course excellent, but they suggest comparisons with others which are thus made relatively inadequate in treatment. Taking other articles more or less at random, we would describe that on "Applied Anatomy of the Abdomen" as "dissector's anatomy," inadequate and not up-to-date. To the contributor of this article, bismuth meals and radiographic researches have never existed. We do not think that the article on "Abortion" would commend itself nowadays to many men. The miserable half-page given to the important subject of "Anaphylaxis" is distressingly inadequate. Arthroplasty is not given a heading at all. The article on "Appendicitis" is fully a dozen years behind present-day surgical opinion. The Basle Anatomical Nomenclature claims 96 pages of very full and useful information. "Actinomycosis" has 8 pages and two plates, "Acne" 8 pages and two plates; "Alopecia" has 11 pages; "Aneurysm" 38 pages;; "Anthrax" 17 pages, "Aphasia" 16 pages, "Amblyopia" 10 pages, "Addison's disease" 10 pages, "Examination of air" has 10 pages, while the great and important subject of "Air-borne diseases" has 6 lines; "Amœbiasis" has 1 page; "Ankylostomiasis" (wrongly written as "Anchylostomiasis") has 2 pages; "Anthropometry" has only 12 lines; "Acetomorphine (heroin)" has only 3 lines; "Antipyrin" has 4, but "Asaprol" has 15, and "Asafœtida" 14. Our readers will see from this short list that while much is so excellent, there is certainly some considerable unevenness of quantity, as well as quality.

[1] Encyclopædia Medica, 2nd Edition, Vol. I., Ab to As; 1915. Edinburgh and London: W. Green and Son (Butterworth and Co., Ltd.), Royal Quarto. Price, £1.

ENTERIC FEVER IN NORTH NEW ZEALAND.

It is reported from Auckland (N.Z.) that the epidemic of enteric fever which gave the authorities much trouble early in the year has again made its appearance. In February of this year, a considerable number of cases were reported from the country districts in the north, more especially in the neighbourhood of Whangape and Pupuke. Nurses were told off to the affected area, and temporary tent hospitals were erected. Several deaths occurred, but the Health Department succeeded after a time in controlling the outbreak. A few fresh cases, however, have occurred in September. A handful of patients have been isolated in the Whangape district, and others are being traced. The chief difficulty to be contended with is due to the fact that the patients are Maoris, whose conception of hygiene and sanitary laws is extremely crude. The Maoris have taken pains to hide sick persons from the inspectors, and, by moving from one district to another, they have rendered the tracing of the cases difficult. Early in November 25 cases were found in the Whirinaki and Mitimiti districts, and others exist elsewhere. So far it has not been found to be possible to inoculate the community against the fever. It is said that the Medical Officer is seeking power to prevent the Maoris from moving from one place to another during the currency of the epidemic.

DIPHTHERIA IN BROKEN HILL.

An epidemic of diphtheria has occurred at White Cliffs in the Broken Hill district, during the latter part of November. The absence of a doctor in the district renders the position more serious. Three deaths occurred, and it is reported that there were eight non-fatal cases. The Acting Government Medical Officer, Dr. H. Dobbyn, reports that the outbreak has been checked.

It is with much regret that we have to record the death of Dr. W. Cleland Wilkinson, of Preston, Victoria, which took place on November 29, 1915. Dr. Wilkinson has been in practice in Victoria for upwards of 34 years. An account of his career will be published in a subsequent issue.

The Medical Journal of Australia.

SATURDAY, DECEMBER 11, 1915.

The Venereal Compound.

Wherever troops are found, there will be a trail of petticoats. History provides the evidence *ad nauseam*. The story of the "most kissed mortal" after the end of the Cuban war was regarded at the time as a comic relief to the earnestness of a fierce campaign. In reality, Lieutenant Hobson was merely a type of a naval man. His services for his country were real and of great value, but as soon as the opportunity offered itself, the warrior succumbed to the insidious temptations of uniform-loving girls. The same problem has to be faced to-day. The Empire requires men for a fearful purpose, and these men must be prepared to face danger and death in her service. They have to be strong men, in the prime of condition, ready to withstand the baneful influence of trench life, of the monotony of waiting and of the excitement of action. The Empire cannot afford to have her fighting sons decrepit or debilitated by disease, least of all by disease due to foolishness, carelessness or wantonness.

It has been determined that, during the period of preliminary training, every soldier or recruit who contracts a venereal disease shall be isolated and kept in isolation until he has overcome his infection. The system of organizing venereal compounds has been accepted almost blindly as the best means of solving a difficult problem. It may, however, be questioned whether this system is the best, or even a good one. The health of the troops must be maintained at the highest standard. For this purpose, the Army Medical Service is in existence. Under an ideal system, every man whose condition of health is not at its best, should be placed under the care of the doctors in the medical service, and either nursed back to perfect health or discharged. The State owes to the men a duty to tend them when they fall victims of the unavoidable noxes which are associated with camp life. Incidentally, the men have a right to claim medical attention of the best kind for any sickness to which all ordinary persons are liable. This medical attendance must be accorded free of all charge, and must be carried out under the most perfect conditions obtainable. In the interest of the nation everything, that can shorten the period of incapacity, must be adopted. With regard to ordinary illness, no one will gainsay the expediency of this. It is debatable whether it should be left to the men to subject themselves to the care of the medical officers, or whether treatment should be adopted in every case of sickness under discipline. In the case of diseases transmissible by contact, some degree of compulsion has to be exerted in the interest of the community, whether this be military or civil. Thus, a person suffering from variola or morbilli is temporarily deprived of his freedom. When the communicable disease is a venereal disease, there is no important epidemiological advantage to be gained by the isolation under restraint of a few, if the majority are allowed full liberty. On the other hand, a soldier suffering from venereal disease must be prevented from conveying the infection to his confrères. The close association of the men in the huts and tents, and the perfunctory way in which drinking and eating utensils are cleansed, demand special precautions in regard to this form of infection. It may, therefore, be assumed that it is not permissible for soldiers infected with gonorrhœa or syphilis to mix with the troops. In order that the loss of service may be limited, the infected men should be given gratuitous treatment under conditions which will lead to the best results within the shortest time possible. What are the alternatives? Apart from confining the men in a prison from which they can only emerge by escape or after they have undergone a satisfactory course of treatment, two methods are available. The men could be admitted to hospital and placed in suitable wards or tents; or they could be given their discharge, with the proviso that as soon as they are cured, or at all events free from infection, they would be taken back into the lines.

The venereal compound method implies a criminality on the part of the patient. Why should a soldier be held up to public opprobrium when the civilian is left untouched? It may be said that the fact being known that the men are sent to the

compound would act as a deterrent. Unfortunately, human nature is not usually provident. Risks are taken without a thought of the morrow, and experience teaches that this method does not deter men from the risk of infection and its consequences. Dr. Hughes calls attention in another column to a horrible danger in connexion with the venereal compound. Even if it were justifiable to single soldiers out in this respect, the mere possibility of one mistake in diagnosis must condemn the system. Modern medicine demands that a diagnosis of gonorrhœa or syphilis must be based on definite evidence, and may not be made on clinical appearances. There may be an excuse for the regimental medical officers making a diagnosis without bacteriological or biological assistance, but there can be none in the venereal compound or in hospital. If the Army Medical Officers cannot guarantee an accurate diagnosis, the men should be free to seek more skilled assistance outside.

We are compelled to the conclusion that means should be adopted to accord our soldiers satisfactory medical aid in all cases of illness, including that of a venereal nature. The reputation of medical men who have volunteered for service is so high that there can be no need for the soldier to go elsewhere for skilled diagnosis and treatment. But the men should be dealt with like patients, and not like prisoners.

DREAD OF INFECTION.

The public loves having its feelings harrowed. Sensationalism always meets with approval from the masses, and no newspaper or other publication can bait the people more effectively than by providing some nauseating story or blood-curdling romance. The average reader does not mind whether the details are true or not, as long as the morbid appetite is appeased. Since the fact has been recognized that some diseases are caused by bacteria, the public has delighted in the idea of the immense danger lurking in each poor, little germ. Some years ago, the people of London learned that tubercle bacilli hid at times in the receivers of the public telephone. The fact was sufficient. If a germ of a deadly disease could find its way into an instrument which the whole world used, the Londoner was no longer safe. Either the County Council had to discover some contrivance for expelling the germs or the population would die out. The same intuitive dread of stray bacilli appears to be disconcerting the inhabitants of Hobart and New Town to-day. The press has given the Tasmanians the usual breakfast appetizer in the form of a scare concerning the proposal to extend the means of combating tuberculosis within the State. A short time ago a sum of money became available to the Hobart General Hospital for the purpose of doing something to deal with those infected with tuberculosis. The provision for consumptives is somewhat limited at present, and a good scheme for attacking the problem is wanting. A sanatorium for consumptives exists at New Town in a suitable situation. The site was selected some ten years ago, and at the present time the selection appears to be justified, inasmuch as it is within easy access of the city, but, at the same time, stands on an open area, with good air, little dust, and little noise. Patients suffering from advanced disease are housed in the New Town Infirmary, where from eight to ten persons of this class are usually under care. This accommodation is inadequate, and it was therefore suggested that a home for patients with advanced tuberculosis should be established in close proximity to the sanatorium. This scheme has received the support of many members of the medical profession and of the public. Nevertheless, the opportunity to trade on the popular dread of germs was too great for one section, and, as a result, opposition has been raised to the proposal, on the ground that the proximity of consumptives to the general population of Hobart would be a serious menace. The idea has been spread abroad that a single bacillus can produce a prodigiously large family of bacilli within three days. This argument has been used in support of the objection raised against the establishment of the home close to the city. How little there is in an argument of this kind is shown by the history of the decrease in the tuberculous death-rate in London, Glasgow and other very large cities. In spite of the fact that persons suffering from tuberculosis of the lungs abound, and are not restricted from spitting promiscuously about the place, the mortality of the disease has fallen from

about 3 per 1,000 of population to under 1. In Tasmania it was approximately 6 per 1,000 in 1914. Moreover, every hygienist has evidence of the effect of the control of patients in a home in regard to the possibility of a spread of infection. As soon as a patient is trained to discharge his sputum into a suitable vessel, to protect the mouth and nose with a handkerchief when coughing and sneezing, and to exercise care when speaking, the most common source of bacilli is cut off.

Sanitary means have achieved a great deal in diminishing the amount of progressive disease and death from tuberculosis. More can be done by an organized campaign. Various schemes have been evolved for detecting every case of infection and for placing every infected person under control. The early, treatable cases must be dealt with in sanatoria or dispensaries. Here the patients can be trained to render themselves safe to mix with the population. More advanced cases require special methods of treatment, in order that life may be prolonged and the patient be enabled to work in comparative ease, in spite of his infection. And, lastly, the hopeless cases need institutional care, partly for humanitarian reasons and chiefly in order that the quantity of virulent bacilli may not be increased indefinitely in the patients' homes. In addition, means should be adopted, aiming at the reduction of infections. These should include systematic endeavours to limit the abuse of alcohol, the provision of roomy, sanitary homes for the masses, pure food, and sufficient opportunity for healthy recreation. A complete scheme should contain provisions for keeping persons, whose tuberculosis has been arrested, in good health. A beginning has been made in Hobart, and further means will doubtless be taken to reduce the mortality of this disease.

ST. VINCENT'S HOSPITAL, MELBOURNE.

The annual meeting of the subscribers and patrons of St. Vincent's Hospital was held at the Town Hall, Melbourne, on November 29, 1915. The Governor-General presided, and a large number of influential persons were present. After the annual report had been received and adopted, His Excellency moved:—

> "That this meeting supports the appeal for the extension of St. Vincent's Hospital, and gives every assistance to the formation of the 'League of the Million Shillings'; that all present be asked to become members of the league by signing their names on the cards distributed in the hall; that all present endeavour to promote the interests of the league, and make the 'million shillings' a reality before the 10th November, 1916."

In an appropriate speech, he paid a warm tribute to the value of the work undertaken by the Sisters of Charity since Sister Mary Aitken founded the Order a century ago in Dublin. He made a special reference to the variety of diseases treated within the hospital, and concluded by expressing the hope that the million shillings would fall freely into the lap of the Reverend Mother Rectress. We have already called attention to the deserving appeal made by St. Vincent's Hospital for funds to enable the Mother Rectress to enlarge the institution. The generosity of Australians has been put to the test time and again, and has never been found wanting. The public has, it is true, been invited to support in an unprecedented way more urgent calls this year than on any previous occasion. His Excellency said that the men in the firing line had the first claim upon the people, but they could not overlook the need that lay at their gates. The sick poor have a heavy burden to carry, and it is in institutions like St. Vincent's Hospital that this burden is lightened. The Sisters show the way by giving their whole energy and strength in the service of the sick without receiving any tangible reward. Theirs is the work of true charity. The provision of additional accommodation for which money is being asked could, no doubt, be obtained from the State, but this short cut would entail a sacrifice which few people would be willing to acquiesce in. Those who have used public hospitals, supported by voluntary contributions and staffed by honorary officers, must recognize the immeasurable advantages of this system as compared with the best Government controlled hospital. Even a casual acquaintance of the inside of St. Vincent's Hospital must convince men and women that it is far better to support a work of love than to leave the sick poor to the matter-of-fact and not all too tender care of a State Department. The public will be foolish if it does not subscribe the million shillings.

A STIMULUS TO SCIENCE.

The utility of the Adelaide University has been materially advanced by a considerable addition to its scholarship endowments. The Senate approved of the statutes governing four new scholarships on November 24, 1915. The first is to be known as the Eric Smith Scholarship, in memory of the grandson of Sir Edwin Smith, Lieutenant Eric Wilkes Talbot Smith, who was killed at the Dardanelles. Sir Edwin has increased the value of the Commercial Travellers' Association Scholarship from £150 to £650. The holder may follow any course provided in the University, and the fees at the School of Mines or at the Adelaide Hospital will be paid by the University for a student of engineering or medicine respectively. The second scholarship will be termed the Mackie Bursary. This will be awarded to a student nominated by the Commercial Travellers' and Warehousemen's Association. The value of the bursary is £100. The third and fourth scholarships have been endowed in the memory of the late Mr. J. L. Young, a well-known educationalist. The

sum of £200 was given to the University for this purpose by the late Mr. Finlayson, while a further sum of £700 has been subscribed by the old pupils of the late Mr. J. L. Young. This endowment will be utilized for the purpose of establishing the John Lorenzo Young Scholarship for research in political economy. The award will be made on the recommendation of the Faculty of Arts, and its value will be £30 per annum. The second will be known as the John L. Young Scholarship for Research. It will be open to graduates or present or past students of the University in any faculty. In addition, the Senate may use a part of the funds to assist members or students of the University to prosecute research, but in this case the recipient will not be entitled to call himself a J. L. Young scholar.

In the last place, Dr. Lendon has prevailed on the Senate to agree to amend the statutes governing the award of the Lister prize at some future date, should there be an occasion to render this advisable. The Lister prize consists of £7 and a bronze medal for the best original thesis on some subject in clinical medicine or surgery. The sum of £100 has been given to endow this prize, and it is anticipated that the amount may be augmented at a later date. These scholarships and the Lister prize constitute a valuable incitement to research, and should enable students and graduates of the Adelaide University to advance their various sciences.

HOW NEWS IS MADE.

A New York evening paper published on October 9, 1915, a cabled message from London to the effect that "an epidemic of typhus fever had broken out in the State of Victoria, Australia, according to a Reuter dispatch from Melbourne, which says 447 cases already have been reported. Of this number, 134 have resulted fatally." It is quite distressing that we did not know of this epidemic at the time, in order that precautionary measures might have been taken at an early date. Reuter's correspondent in Melbourne kept his secret very well, since the message travelled all the way to England, and thence to New York, and the news only reached us by the ordinary mail from Yankee-Land, in the early days of December. The next time typhus breaks out in Australia, perhaps Uncle Sam will be kind enough to let us know quickly. It is too risky to allow an epidemic to get two months' start of the health authorities.

British Medical Association News.

SCIENTIFIC.

A meeting of the New South Wales Branch was held on November 26, 1915, at the B.M.A. Building, 30-34 Elizabeth Street, Sydney, Dr. George Armstrong (the President) in the chair.

Dr. Cecil S. Molesworth read the notes of a unique case of rupture of the vagina during the second stage of labour (see page 555).

Dr. Ralph Worrall stated that he found difficulty in following the course of events. He understood that in the interesting case recorded by Dr. Molesworth, there had been no rupture of the uterus, but that the tear in the vagina extended directly into the peritoneal cavity. Usually, the rupture involved the uterus and spread into the vagina. He was at a loss to understand how the fœtus could have escaped into the peritoneal cavity, unless the uterus were ruptured. The case should certainly be put on record.

He was reminded of a case which occurred in his practice many years ago, which might well serve as a caution to practitioners. In those days there were no good holding forceps. He was dilating a cervix with Hegar's dilators, and made the grave mistake of exerting pressure on the cervix without either supporting the uterus from without or securing it with vulsella by the cervix. The uterus was driven upwards, and the result was that the posterior fornix gave way. Coils of small intestine presented within the vaginal tear. The patient, however, did not develope any untoward signs, in spite of the fact that the tear was left unsutured. He had infringed a cardinal principle. When Hegar's dilators are being pushed through the cervix, a strong hold must be secured by means of forceps, or the uterus must be supported by the external hand when pregnant, as in the case referred to.

Both Dr. Worrall and Dr. George Armstrong sought information in regard to the condition of the cervix before delivery. The former thought that the specimen should have been preserved, as it would form most valuable evidence of the nature of the injury. In reply to these enquiries, Dr. Molesworth explained that when he first saw the patient, the whole fœtus was outside the uterus. The cervix was in the usual condition found after the completion of labour.

Dr. Corlette recalled a case in which the head of a fœtus was driven into the rectum without the peritoneum being opened. If this could happen, he saw no reason why the head should not be driven through the vaginal wall.

Dr. W. F. Litchfield read a paper on "Septic Pneumonia." The text of this paper, and a short account of the discussion that followed, will be published in a subsequent issue of *The Medical Journal of Australia*.

Dr. G. S. Thompson read a long paper on the therapeutic value of posture and of venous suction, as obtained by posture and respiratory exercises. He stated that the Fowler position monopolized the greater part of the attention paid to posture, and was applied perhaps with an excessive zeal that failed to realize its limitations, if not actual dangers. He expressed the opinion that this position was often used without discrimination, and incorrectly. In some subjects, *e.g.*, elderly, stout persons, elevation of the foot end of the bed might prove distressing, and should not be used. He suggested that the postural and respiratory plan was not intended to replace other lines of treatment, but to supplement them. In congestive conditions, posture should be combined with deep respiratory exercises to increase the aspiratory action in the veins. He claimed that elevation of the foot of the bed was most useful for congestive and inflammatory lesions below the level of the heart. He mentioned fractures, orchitis, arthritis, osteitis, oozing after operations on joints and bones, etc., as being suitable to this form of treatment. He explained the action of raising the foot end of the bed by assuming that congestion would be relieved as a result of gravity. He attributed great importance to the mechanical factor, which was under the surgeon's control.

In dealing with foot elevation, he turned his attention first to appendicitis. He considered that some chronic cases suitable for interval operation were favourably influenced by the combined suction method. He advocated foot elevation in the place of the Fowler position for acuter cases while awaiting diagnosis or operation, or while under observation. By these means he thought that the scale might be turned in favour of spontaneous recovery, or that suppuration and gangrene might be prevented, delayed or reduced in severity. In the next place, he dealt with nephritis, eclampsia, nephroptosis, nephropexy, hydro- and pyo-nephrosis. He regarded his mechanical explanation as applicable to render clear the nature of orthostatic albuminuria, the relief of urinary suppression by nephrotomy, decapsulation, cupping, leeching, purgative, diaphorectics, etc., the action of hot packs and air baths in nephritis, the action of venous section and that of vaso-dilators. He recommended the postural treatment combined with respiratory exercises for eclampsia, on the assumption that this condition

is due to defective elimination, resulting from renal pressure in a neuropathic subject.

By raising the foot end of the bed in nephroptosis, the kidney would naturally fall into place. In hydro- and pyonephrosis, the fluid would have a better chance of flowing from the cavity.

He advised raising the foot end of the bed in liver abscess, discharging through the respiratory channels, and in pulmonary abscesses and discharges, *e.g.*, bronchietasis, tuberculosis, pneumonia, broncho-pneumonia, bronchitis, etc. When the position was employed in diseases of the respiratory tract, antiseptic sprays should be used to prevent otitis, etc. Incidentally, he made the suggestion that broncho-pneumonia, complicating diphtheria, was frequently due to discharge from the larynx running down the air passages by gravity. Raising the foot end of the bed would be useful in this condition also.

In the next place, he asserted that the danger of lung infection by aspiration during ether anæsthesia could be avoided by the employment of the open method, the preliminary use of hyoscine, morphine and atropine, and by foot elevation. He also advocated foot elevation in circumcision, phlebitis, hæmorrhoids, cystitis, prostatis, epididymitis, prostatectomy, bone and joint conditions, amputations, etc. It was useful in the treatment of shock by reducing cerebral and cardiac anæmia. He stated that one of the most important factors in preventing the recurrence of abdominal adhesions was the after treatment by posture. In proctoclysis, where this position was not otherwise contraindicated, it would favour the retention of the fluid. He announced his intention of describing in a separate article a new method of treating typhoid fever by proctoclysis in this posture, supplemented by food abstention and intestinal medication. He also indicated that he had under consideration a drip method of lubrication and drainage for affections of the peritoneum, with tendency to the production of adhesions, and that he proposed to publish the details in a separate article at a later date.

In the second part of his paper, Dr. Thompson dealt with head elevation. He advocated this during the puerperium to favour drainage at the most dependent part. He maintained that the ordinary confinement violated the surgical axiom that the outlet for discharge should be in the most dependent position. He claimed that head elevation would considerably lessen or stop the incidence of puerperal fever, post-puerperal asthenia, flabby abdomen, malpositions, etc. He considered that head elevation was also useful after curettage.

Dr. Thompson then dealt with lateral elevation, which he recommended for use after operations for abdominal adhesions, for pulmonary tuberculosis, for drainage of lateral and anterior cavities and abscesses (*e.g.*, liver abscess), for gonorrhœa to curtail avoidable gravitational infections up the urethra, and for intra-cerebro-spinal affections.

He claimed that the postural method of treatment was not in reality opposed to Bier's plan of obstructive hyperæmia, and concluded by discussing the difference between artificial and inflammatory hyperæmia.

Dr. W. F. Litchfield considered that there was too much suggestion in Dr. Thompson's paper, and not enough practice. Dr. Thompson had announced his attention of publishing papers on the peritoneum and on enteric fever. He ventured to suggest to Dr. Thompson that, before he read these papers, it would be well if he applied his theories to practice. He did not agree with Dr. Thompson's explanation of eclampsia. In heart disease, venous congestion existed for years in an extreme degree, but the patients did not get eclampsia.

Dr. C. E. Corlette considered that progress was more likely to result after trial, error, and experience than by hypothesis. Dr. Thompson had mentioned a great many practices, but extended experience and research would be required before what he had said could be accepted. Hypothesis was, after all, but a guess. If the guess were a true one, benefit would accrue, but it had to be tested. He did not think it was advisable to rely too much on this form of research. In regard to what had been said of the Fowler position, Dr. Corlette pointed out that this position had been found by experience to be extremely useful. It was of value, partly because it kept the weight of the abdominal organs off the diaphragm.

Dr. E. H. Binney said that the underlying principles of physiology had been misunderstood, misinterpreted or neglected in Dr. Thompson's paper. He was not convinced. He failed to understand how the elevation of the foot of the bed could do any good. Veins dilated in relaxed portions of the body, and the dilatation gave rise to the action of suction.

Dr. H. C. Rutherford Darling pointed out that subdiaphragmatic abscess had become an extremely rare condition. This was due to the almost universal adoption of the Fowler position. He had only seen two cases, and both of these were in people who had been placed in the horizontal position.

Dr. Thompson, in reply, pointed out that he had no intention to deny the value of the Fowler position. His proposals in regard to treatment by posture were based on a general principle, which was an extension of a well-established fact.

ANNUAL MEETING.

The Annual General Meeting of the Victorian Branch was held on December 1, 1915, at the Medical Society Hall, East Melbourne, Dr. Andrew Honman (the President) in the chair.

Before proceeding with the business, the President, speaking in the name of the members, welcomed Colonel H. W. Bryant, who had just returned from Egypt. In thanking the members, Colonel Bryant said that he had kept a diary during his absence, and would be pleased to give members an evening of reminiscences dealing with the troubles which had to be put up with in Egypt. These reminiscences would be illustrated by lantern slides.

Dr. Honman said that the magisterial enquiry into Dr. Meade's conduct at the Base Hospital had resulted in his complete exoneration. On account of the attitude adopted towards Dr. Meade in a certain place, the members should take the first opportunity of congratulating him on his success in refuting those charges. He called on Dr. A. V. M. Anderson to propose a motion, as framed by the Council.

Dr. Anderson moved:—

> This meeting of members expresses its sympathy with Dr. Meade on account of the charges recently made against him; the Branch congratulates him on his complete exoneration from the charges by the finding of the Chairman of the Base Hospital Inquiry Board; and, further, it expresses its confidence in him as a medical practitioner.

He bore testimony to the amount of work Dr. Meade was called upon to do, and to the thoroughness and efficiency with which he carried it out. There was abundant justification for what he had done. No evidence had been adduced in support of the charges.

Dr. Howard also bore testimony to the excellent work of Dr. Meade at the Base Hospital. The resolution was carried unanimously.

It was further agreed that the resolution be conveyed to the lay press after it had been published in *The Medical Journal of Australia.*

For the first time, voting for the election of officer-bearers and members of the Council of the Victorian Branch and of the Committee of the Medical Society of Victoria was conducted wholly by post. Two hundred and thirteen ballot papers had been returned, and the scrutineers had counted the votes on the previous evening. The following were declared elected:—

President: Dr. A. V. M. Anderson (unopposed).
Vice-Presidents: Dr. R. L. M'Adam and Professor R. J. A. Berry.
Hon. Treasurer: Dr. C. H. Mollison (unopposed).
Hon. Secretary:: Dr. L. S. Latham (unopposed).
Hon. Librarians: Dr. H. Douglas Stephens and Dr. A. W. D. Robertson.
Members of Council and of the Committee: Drs. W. R. Boyd, A. Jeffreys Wood, J. F. Wilkinson, Andrew Honman, L. J. Balfour, Konrad Hiller, W. Ostermeyer, Alan Newton, A. E. R. White, A. L. Kenny, Alex

(*Continued on page* 564.)

Abstracts from Current Medical Literature.

PATHOLOGY.

(205) The Action of Milk as Complement.

R. T. Hewlett and C. Revis have investigated the conditions under which the action of milk as complement in hæmolytic reactions is observed (*Journ. of Hygiene*, July, 1915). Heating the milk for 30 minutes to 55° C. was effective in destroying the complement activity of the milk in all cases. The complementary substance does not pass through a porous porcelain filter under pressure, so that the whey or milk serum is without action as a complement. Removal of the salts of lime by addition of soluble oxalates to the milk has no effect on its hæmolytic powers. Attempts were made to destroy the complement in milk by agitation, but the attempt was unsuccessful. Milk is, however, capable of exerting a stimulatory effect on complement. This effect is noted with ordinary milk, or milk heated to 55° C. The stimulatory body is intimately mixed with caseinogen, and is removed from milk with the separation of caseinogen.

(206) Wassermann Reaction in Leprosy.

W. Fletcher (*Journ. of Hygiene*, July, 1915) has examined 100 lepers at Kuala Lumpur, Federated Malay States, by means of the Wassermann test, carried out with the modification of Browning. Positive results were obtained in 22 cases. The amount of complement deviated was, in some cases, as much as thirty to fifty doses. Among a control group of 110 persons there were obtained 11 positive reactions. In only one of the lepers could any positive signs of syphilis be observed. Thirty-three of the lepers admitted a history of previous syphilitic infection, and of these thirty-three thirteen gave a positive reaction. Of the remaining 63 nine yielded positive tests. In the control group twenty-one admitted former syphilitic infection, and of these eight gave positive reactions. Among the remaining eighty-nine three yielded positive reactions. There were 12 positive reactions among 44 cases of tubercular leprosy, and 10 positive reactions among 56 cases of anæsthetic leprosy. The average duration of the illness among those that gave a positive reaction was four years and eight months, while the average duration of the illness among those that gave no reaction was three years and eight months. It must be remembered that there were many cases of long standing in both categories. Serum from the lesions was examined with dark ground illumination for the presence of *Treponema pallidum*, but no spirochaetes were observed. The luetin test was applied to 21 lepers, but in every case with a negative result. In this series, 13 cases gave a positive Wassermann reaction, and eight yielded a negative reaction. The luetin test was applied to a control group of non-leprous persons. Ten cases, *i.e.*, 50%, gave a positive reaction. Summing up the various results, the authors consider it as probable that leprosy, apart from syphilis, may cause a positive reaction. They point out that leprosy does not cause the luetin test to become positive.

(207) A Coccobacillus Pathogenic to Man.

A. Besredka has separated from a large number of suppurating wounds a coccobacillus appearing like a shuttle, and having all the characters of a Pasteurella (*C. R. Soc. Biol., Paris*, May, 1915). This organism is frequently met in the masses of leucocytes and microbes, known from their yellow colour as yellow grains. The organism has been isolated from the cerebro-spinal fluid in three cases of meningitis. It has also been found in the blood of patients suffering from symptoms resembling those of typhoid fever. Evidence has been obtained of the association of the coccobacillus with many febrile states, accompanied by gastro-intestinal symptoms. The name of *coccobacillus veroduncusis* has been given to the germ. The microbe resembles the bacillus of plague in shape. It is surrounded by a clear space, and is actively motile. The bacillus exhibits polar staining, and decolourizes with Gram's stain. It grows on all media, does not liquefy gelatin, does not coagulate milk, and does not ferment lactose. It is pathogenic for rabbits and guinea-pigs. It may be considered as a human Pasteurella.

(208) Sterilization of Vaccines.

F. E. Taylor (*Journ of Hygiene*, July, 1915) is of opinion that the opsonic index serves as a measure of the antigenic powers of a vaccine, that the toxicity of the vaccine corresponds with the negative phase, and the immunizing powers of the vaccine corresponds with the positive phase of the opsonic index. Using these methods he has determined the effects of various agents for killing vaccines on a staphylococcal vaccine. He arrives at the conclusion that unheated vaccines killed by antiseptics or ultra-violet rays, have no advantages over heated vaccines. He finds that the time of heating need not be limited. Even so high a temperature as boiling does not destroy the antigenic properties of staphylococcal vaccines.

(209) Post-mortem Reflexes.

J. H. Catton has examined the superficial and tendon reflexes on the bodies of fifteen persons, dead from various causes (*Journ. Amer. Med. Association*, September, 1915). The observations were commenced immediately after death, and continued for sixty minutes. From the moment of death no true deep reflexes were obtained by tapping the tendons of the biceps, triceps, quadriceps extensor and gastrocnemius muscles in a proper manner. The skin reflexes were also lost when examined in a satisfactory way. Responses similar to tendon reflexes were obtained if the tendons were tapped sufficiently high as to include some muscle fibres. Again, a response, simulating a true plantar reflex, is obtained by pressing deeply on the sole in seeking to elicit the reflex. These contractions are due to increased muscular irritability, which sets in after systemic death, and increases to a maximal degree some minutes after death. Taps on the belly of a muscle lead to muscular contractions. Short, sharp taps lead to localized contractions. These localized contractions endure for a long time, and are quite different from the general muscular contractions involving the whole muscle. Many reflexes were elicited around the wrist, but these are ascribed to muscular irritability. The author discusses the application of these facts to diseases with muscular irritability.

(210) Experimental Cholera.

H. Violle and Chrendiropoulo (*C. R. Soc. Biol. Paris*, June, 1915) have endeavoured to produce the intestinal lesions of cholera in rabbits. They find, as observed by earlier workers, that even the largest doses of cultures produce no lesions or symptoms in healthy rabbits when administered by the mouth. The vibrios die and disappear in a few hours. The same absence of symptoms is seen after intravenous inoculation. If, however, the vibrios are placed in a loop of intestine confined between ligatures, the symptoms of intestinal disturbance are marked, lesions occur in the intestinal wall, and the vibrios multiply freely in the loop instead of dying out. The characters of the intestinal lesions vary with the length of the loop, its situation along the intestinal canal, and the virulence of the culture. Intravenous inoculation of the material from the loops of intestine leads to the symptoms of cholera. This material is intensely toxic.

(211) Leucocytes in Aseptic Empyemata.

M. Petzetakis (*C. R. Soc. Biol. Paris*, July, 1915) has studied the leucocytes in aseptic purulent effusions in the pleural cavities. These effusions had occurred in 12 patients. In one case the empyema followed pneumonia, in another case it appeared after acute articular rheumatism, in two cases after malaria, and, in the remaining cases, after bronchitis or bronchopneumonia At the commencement of the effusion the fluid was sero-fibrinous, with abundant endothelial cells. Neutrophile leucocytes predominated. Later, the polymorphic cells were transformed into eosinophile leucocytes. This transformation continued until 75 to 97% of the cells were eosinophile leucocytes. The fluid became purulent, and then, again, sero-fibrinous. As this change occurred the

eosinophile leucocytes disappeared, and an abundant lymphocytosis became developed. The investigator believes that the transformation occurs locally, since the neutrophile cells are diminished at the exact rate that the eosinophile cells are increased. Further intermediate forms are numerous which show the appearance of eosinophile granules among the neutral granules in the cytoplasm. Again, the eosinophile cells only make their appearance when diapedesis has reached its maximum or somewhat later. From the uniformity of their observations they consider that this transformation occurs invariably in aseptic empyemata.

PEDIATRICS.

(212) Supply of Air to Infants in Institutions.

In the hope of obtaining some definite data of value, Southworth (*Arch. of Pediatrics*, Sept., 1915) circularized each member of the American Pediatric Society, requesting an answer to the following questions: (*a*) What is the cubic air-space per infant in your wards? (*b*) Do the authorities make any allowance of air space for adult attendants? (*c*) What is the minimum cubic air-space with which bottle-fed infants do well in your wards? (*d*) What is the optimum air-space per crib? (*e*) Do infants require the same, less, or more air-space than adults in wards devoted solely to the care of each group? (*f*) Do bottle-fed infants require more air-space than nursing infants? (*g*) Can any distinction be made between "medical," "surgical," or "bottle-feeding" wards in the amount of cubic air-space per infant? (*h*) Do you class bottle-fed infants in any institution as well or sick? (*k*) Do you consider limited air-space an important contributory factor to the high mortality of institution or hospital infants, especially among those bottle-fed? Thirty-three answers were received from pædiatricians in fifteen districts, dealing with 49 hospitals and institutions containing infants, and the various reports are summarized as follows:—(1) The majority (21) of the hospitals and institutional wards for infants provide 1,000 cubic feet and upward of air-space per inmate, five reported 600 cubic feet or less. (2) Even with 1,000 or more cubic feet of air-space with free ventilation is deemed highly important, and as the space decreases the free ventilation becomes more and more important. (3) No allowance of air-space is at present made for the necessary attendants. (4) Reduced cubic air-space means less square feet of floor space and less separation between cribs, with proportionately increased opportunity for the spread of cross-infections. There is a growing belief that even with free ventilation separation of the beds plays as important a rôle as cubic space. Such adequate separation, however, is only attainable with large cubic air-space. (5) On account of their handicaps, bottle-fed infants are more liable to require more space than nursing infants. (6) Bottle-fed infants require as much cubic air-space as so-called sick, "medical" or "surgical" cases among infants. (7) The majority of pædiatric physicians believe that infants should have as much air-spaces as adults, if not more, and this is especially true of bottle-fed infants, because they are more susceptible to infection, suffer in their nutrition in confinement, and notoriously do badly in all save the best equipped institutions. (8) Bottle-fed infants when retained for any considerable length of time in hospitals or institutions, cannot properly be classed as healthy infants, because a considerable proportion of them suffer both in their digestion and nutrition, as well as from acute intercurrent affections, and therefore require unusual attention in their feeding and general nursing care. (9) Limited cubic air-space, involving limited floor space, is an important contributory factor, though by no means the only factor in the high mortality of artificially-fed infants, and such crowding in limited space is very commonly the concomitant, if not itself a cause, of faulty hygiene, insufficient care, and inadequate nursing. (10) Even with a liberal allowance of cubic air-space, free and abundant ventilation is of equal importance. In addition, provision for roof gardens, porches and sun parlours is advisable, if not imperative. (11) The mere presence of windows does not of itself constitute ventilation, but their proper use must be provided for. (12) A low minimum of cubic space established by law, without definition of what constitutes efficient ventilation, and without enforcement, may be more harmful than beneficial, and constitute a virtual right to overcrowd in ill-ventilated wards. (13) The example of the more progressive hospitals and institutions which provide the larger amounts of air-space per infant, together with free ventilation, is to a considerable extent nullified by state and local regulations, licensing, for the less progressive, the employment of minimum air-space for a class of infants among whom there is admittedly an unduly high mortality.

(213) Localizing Brain Symptoms in Tuberculous Meningitis.

Hawthorne (*British Journ. of Children's Dis.*, August, 1915) reports two cases of tuberculous meningitis in which the disease was ushered in by a unilateral convulsive seizure, followed in one instance by a localized paralysis, the ordinary symptoms of the disease not appearing till some days later. The author suggests that in both his and similar cases the sudden and limited motor phenomena mark the arrival of the specific irritant within the cranial cavity, and its application to a localized area of brain tissue. In each instance the meningitis is secondary to some primary tuberculous focus, from which the irritant reaches the brain, through the blood stream, as an embolus, or more probably as minute multiple emboli. Such emboli arriving in force on the motor cortex of one hemisphere would be capable of producing in the cortex disturbances, expressed clinically as unilateral convulsions, or unilateral paralysis, to be followed by a local recovery of nerve function with disappearance of convulsion and paralysis. In some cases the first emigration is controlled with the formation of a localized tuberculous focus in the cranium, which later takes on renewed activity. Again, in pulmonary tuberculosis the patients occasionally develope an acute cerebral event (*e.g.*, an ocular paralysis), which is followed after an interval of weeks by a generalized meningitis. In all probability the sequence of events in the two cases reported is similar to that mentioned as occurring occasionally in pulmonary tuberculosis and in localized tuberculoma of the brain, with the trifling exception that the period of limitation or quiescence of the primary cerebral infection is of less duration, being indeed a matter of days rather than of weeks.

(214) Parapharyngeal Abscess.

In the retro-pharyngeal area there are two sets of glands: (1) The retro-pharyngeal, small and few in number, forming a chain on each side of the median line in the bucco-pharyngeal fascia, posterior to the pharynx and anterior to the arch of the atlas. These receive drainage from the nasal cavities, the naso-pharynx and the auditory tubes, and they atrophy in early childhood, being rarely met with after the age of 3 years. In these the ordinary retro-pharyngeal abscess originates. (2) The deep cervical glands, which drain mouth, tonsils, palate, pharynx, tongue, nasal fossæ, interior of skull, and deep parts of head and neck. It is in the superior group of these glands that parapharyngeal abscess arises. Heiman (*Amer. Journ. of Children's Diseases*, August, 1915) considers that influenza, tonsillitis, and the infectious diseases are the predisposing causes of this form of pharyngeal abscess, and that it is more common after the age of 3. First of all there is mild pharyngitis, followed by a septic type of fever for some days before local signs become apparent. Discomfort, difficulty in swallowing, and thickness of speech usually occur, and then a swelling appears internally just lateral to the tonsil, or externally just below the angle of the jaw, and in front of the sterno-mastoid. There is seldom œdema of the uvula or pharynx. The tonsil is displaced towards the median line. Diagnosis has to be made between para-pharyngeal abscess and retro-pharyngeal, peritonsillar and interstitial (or tonsillar) abscesses, and also cervical adenitis occurring in the course of the infectious diseases. Repeated internal incisions frequently fail to cure, and the ideal method of treatment lies in external operation, with drainage as soon as the condition is diagnosed.

BRITISH MEDICAL ASSOCIATION NEWS.

(*Continued from page* 561.)

Lewers, F. L. Davies, J. H. L. Cumpston and Bertram Crellin.

Dr. Honman, in vacating the chair, said that his successor, Dr. A. V. M. Anderson, would prove a tower of strength in upholding the dignity of the Branch and in looking after its interests generally.

Dr. Anderson, in taking the chair, said that he realized the dignity of his position, which was the highest honour that could be conferred by members upon one of their own profession, that of the presidential chair. Dr. Honman had had very onerous duties to perform during his year of office. He was peculiarly suited to perform the work demanded by the military authorities, from his experience of military affairs in South Africa. He trusted that he would have large support from him and from the other members of the Council. Fortunately, the success of the Branch did not depend so much on the President as it did on the Council and on the members generally. He trusted to have their support in keeping the Branch going in these difficult times.

The annual report was then taken as read.

ANNUAL REPORT OF THE COUNCIL OF THE VICTORIA BRANCH FOR YEAR ENDING DECEMBER 1st, 1915.

The Council of the Branch and the Committee of the Society present the Annual Report for the year 1915:—

Election.

At the annual meeting held last December the following office-bearers and members of the Council and of the Committee were elected:—

President, Dr. Andrew Honman; Vice-Presidents, Drs. A. V. M. Anderson and J. Ramsay Webb; Hon. Secretary, Dr. Fay Maclure; Hon. Treasurer, Dr. C. H. Mollison; Hon. Librarians, Drs. A. W. F. Noyes and H. Douglas Stephens; Members of Council and of Committee, Drs. W. R. Boyd, Stewart W. Ferguson, R. H. Fetherston, Konrad Hiller, F. Miller Johnson, W. Ernest Jones, A. L. Kenny, Alan Newton, W. Ostermeyer, J. D. King Scott, R. R. Stawell, A. E. R. White, J. F. Wilkinson and A. Jeffreys Wood.

At a subsequent meeting of the Council the following appointments were made:—Hon. Assistant Secretary, Dr. L. S. Latham; Hon. Assistant Treasurer, Dr. C. P. W. Dyring; Director for Victoria of the Australasian Medical Publishing Company, Dr. W. Kent Hughes.

During the year the following members of the Council tendered their resignations on being accepted for active service abroad:—Drs. Hughes, Maclure, Stawell, Johnson, and Dyring. The vacant offices were filled as follows:—Hon. Secretary, Dr. L. S. Latham, in place of Dr. Maclure; Hon. Assistant Treasurer, Dr. Frank Andrew, in place of Dr. Dyring; Hon. Assistant Secretary, Dr. Alan Newton; Director of Australasian Medical Publishing Company, Dr. R. H. Fetherston, in place of Dr. Kent Hughes.

Council Meetings.

There were 24 Ordinary Meetings of the Council and four Special Meetings. The attendance was as follows:—

Dr. Anderson	25	Dr. Newton	13
Dr. Kenny	25	Dr. Cumpston	10
Dr. Boyd	23	Dr. Dyring*†	10
Dr. Hiller	22	Dr. Maclure†	9
Dr. Wood	22	Dr. Fetherston†	8
Dr. Honman	21	Dr. White	7
Dr. Jones	21	Dr. Hooper*	7
Dr. Scott	19	Dr. Webb†	6
Dr. McAdam*	18	Dr. Ferguson	6
Dr. Wilkinson	17	Dr. Johnson†	5
Dr. Latham*	17	Dr. Hughes*†	5
Dr. Stephens	16	Dr. Andrew*	5
Dr. Ostermeyer	16	Dr. Noyes†	3
Dr. Mollison	16	Dr. Sewell*	3
Prof. Berry*	13	Dr. Stawell†	1

* Elected during the year. † Absent on active service abroad.

Representatives of Divisions:—

Dr. Henderson	3	Dr. Kennedy	1
Dr. Kelly	2	Dr. Ffrost	1

Sub-Committee.

The following Sub-Committees were appointed by the Council, with the first-named members as conveners:—

Organization.—Drs. Fetherston, Boyd, Johnson, Dyring, Wilkinson, Webb, Scott, Ostermeyer and Maclure. Drs. McAdam and Latham were appointed to fill the places of Drs. Johnson and Maclure, resigned.

Press.—Drs. Honman, Latham and Wilkinson.

Ethical.—Drs. Kenny, Webb, Johnson, Boyd, Anderson and Maclure. Drs. McAdam and Latham were appointed to fill the places of Drs. Johnson and Maclure, resigned.

Legislative.—Drs. Honman, Wood, Jones, Stephens, Newton, Boyd and Maclure. Dr. Latham was appointed to the vacancy caused by the resignation of Dr. Maclure.

House.—Drs. Honman, Mollison and Latham.

Scientific.—Drs. Hiller, Mitchell, Latham, Newton, Maclure, Stephens, all of whom represent metropolitan hospitals.

War Organization.—Drs. Honman, Boyd and Latham, Professor Berry and Mr. Crouch.

Appointments by Council.

The following appointments were made by the Council:—

Representative on Central Council: Dr. G. A. Syme.

Representative on the Representative Body: Dr. G. A. Syme.

Delegates at the Annual Meeting: Drs. B. M. Sutherland and Victor Hurley.

Representative on the Council of the Bush Nursing Association: The President.

Representative on the Committee of Infectious Diseases Hospital: Dr. A. Jeffreys Wood.

Representatives on Federal Committee.—For 1915 (in place of Dr. Ramsay Webb): Dr. W. R. Boyd. For 1916: Drs. W. R. Boyd and L. S. Latham.

State Medical War Committee: Drs. Honman, Kenny and McAdam.

Membership Roll.

There is now a membership roll of 834 members as against 802 of last year. Fifty-one members have been elected and 21 have been transferred from other Branches. On the other hand, we have lost 12 members by death, 8 have resigned, and 14 have been transferred to other Branches. Ten have asked to be placed on the "travelling list," while 4 from that list have returned to the list of active members.

Certain members of the Association residing within the State of Victoria, and therefore, *ipso facto* by the Bye-laws of the parent Association, members of this Branch are not paying the subscription for membership of the Branch, but instead are remitting 25s. per annum to the London office. A protest against similar action has been received from the New Zealand Branch, and it has been transmitted to Dr. G. A. Syme, who has been requested to endeavour to have the anomaly altered by the Council of the Association.

War and the Medical Profession.

The end of the war, with its awful toll of dead and maimed humanity, is not yet within sight. Much of the administration of the Council during the past twelve months has been directed towards meeting the altered situation.

Two hundred and thirty-two of our members are now engaged on whole-time military service in the trenches or in military hospitals. Of necessity there has been a severe dislocation of civil practice, but the colleagues of the absent military officers have with a commendable patriotic spirit undertaken to protect the vacant practices and to restore them, together with all appointments, at the conclusion of this national upheaval.

Foreseeing the long duration of the war and the future demands to be made upon the medical profession for military service, the Council met the P.M.O. of the district in conference with a view to ascertaining in what direction the Association could help the Defence Department. A Committee was formed for the purpose of drawing up a number of questions which were to be submitted to our members. This scheme was submitted to a meeting of the Federal Committee, held in Melbourne, and, with some few modifications, more especially relating to the medical needs of the Defence Department, was sent to every member or eligible member of the B.M.A. throughout Australia.

The response to this circular in Victoria was very gratifying. It was sent out to the 1,039 members or eligible

members domiciled in Victoria, and from the replies received we have been able, almost without exception, to account for every medical man in the State. A War Organization Committee was formed, and, with the aid of this census, was able to so organize the profession as to minimise the evils which were arising from a haphazard selection of men from one-man practices and from the staffs of the University and of the hospitals. Members of this committee met in conference bodies of members in Ballarat, Bendigo, Geelong, and in most of the metropolitan areas, in order to discuss with them the best means to meet the dearth of locum tenentes and at the same time so to organize as to release one or more of their colleagues for short periods of camp service.

At the outbreak of the war a truce with the Friendly Societies was declared, the B.M.A. engaging to take no steps to enforce the Model Lodge Agreement on the understanding that the Friendly Societies would preserve the *status quo*. This understanding we have honourably observed both in the spirit and in the letter. We regret to record that at least one Order has thought fit to break away. The Council has been forced to consider what steps it should take to enforce the observance of an honourable compact. In spite of this truce the members are warned that there is the greatest need for vigilance on their part. Recent utterances of a member prominent in the councils of the Association of Friendly Societies in the State Parliament leaves us under no illusions as to their irreconcilable attitude of misrepresentation of the aims of our Association. The Compensation Fund which was raised to meet any eventualities is invested in gilt-edged securities of a face value of £4,000, and, with the approval of subscribers, this fund will remain intact in order to be ready should circumstances arise that would make the possession of such a fund invaluable.

At the request of the P.M.O. an Advisory Board was appointed by the Council to assist him in making a judicious selection of medical officers, always bearing in mind the necessity for retaining in Victoria certain men so as to guard against any disorganization of the civil profession. The Board also advises him generally in the difficult task that faces him in many directions.

Towards the middle of the year the invalided soldiers began to return in hundreds. To assist the Defence Department to meet the sudden demand the Association came forward with a list of medical men prepared to undertake various branches of military service, so that the Base Hospital and the camps were soon equipped, while the general hospitals took over such men as could not find accommodation in the military hospitals.

It was soon ascertained that the nurses in military hospitals were being overtaxed, and that the drain from civil practice was bringing about a considerable shortage in the community. Your Council asked for a Conference at the Victoria Barracks of bodies interested, with the result that third-year trainees will now be taken on at the Base Hospital, and this experience will count towards the R.V.T.N.A. certificate. This privilege will also be extended to the third-year trainees of Government Mental Hospitals.

Many of the returned soldiers were being discharged permanently disabled. The Federal Parliamentary War Committee requested the President to convene a meeting of Presidents of the Branches or their proxies, and so constitute a permanent Federal Medical War Committee. This body met in Melbourne and drafted a constitution both for itself and for six State Medical War Committees. The constitution was accepted by the Federal Parliamentary War Committee, and the State Medical Committees have been appointed in each State. Already the Victorian State Medical Committee has been able to render invaluable aid to maimed soldiers by its recommendation of artificial limbs, of massage, of further medical treatment, and of the need of industrial education whereby the soldier may be retained as a valuable asset to the community.

The Council considered a scheme for the returned convalescent soldiers, which was referred to it by the Federal Committee. There were several points in it which the Council did not feel it was advisable to accept, especially that relating to the providing of medicines and dressings. The Council refused to undertake the provision of medicines and dressings, and it was resolved that the profession would give the necessary attendance in a purely honorary capacity. The question was submitted to a meeting of the Branch, and the action of the Council was confirmed. Since then negotiations have been opened by the Defence Department to include attendance upon the enlisted soldiers who had not proceeded to the front. It was pointed out that we had agreed to attend returned soldiers only and in those districts alone where no military hospitals had been established, and that, therefore, we could not accede to this request. Since then orders have been issued that any enlisted soldiers who become sick on leave, if unable to attend at a military hospital, must provide medical attendance at their own expense.

The Council, amid its other work, has not lost sight of the necessity of leading public opinion as to the danger to the community of the present epidemic of cerebro-spinal meningitis. A committee waited upon the Minister of Health and drew attention to the necessity of having this disease made notifiable. It also met in conference the health authorities with a view to ascertaining the best method of combating the disease. The presence of the disease in military camps, with the consequent menace to the public, was also kept in mind, and the committee waited on the Minister of Defence and asked that full powers should be given to its medical officers to deal with it, and that precedence should be given to any of the demands they should consider necessary for the welfare of the troops—a request which was immediately granted. It is satisfactory to say that the efforts of the committee have been followed by complete control over the disease in the camps.

In connexion with this epidemic a Medical Commission was formed under the chairmanship of Sir Harry Allen, with representatives of the leading health authorities and our President. The result of its labours will have been published before the date of the annual meeting.

A reduction has been authorized in the salaries of all military officers, but representations have been made to the authorities that medical officers are in a wholly different position from combatant officers, and that by enlisting they are making considerable sacrifices. It is hoped that as a result of these representations the present rates will continue to hold.

Our profession has already paid a heavy toll to its patriotism; not only abroad in the firing line but in camp duty at home. We have lost in the trenches Captains G. C. Mathison, F. S. Campbell and K. M. Levi. In wounded our members have suffered equally. In camp duty we have lost by death Captains G. Howitt, A. W. H. Langley, Leonard A. Wright, A. C. Rothera, and J. F. Fairley. Sickness has disabled many, but, in spite of all these losses, we have many others anxious to play their part in the service of the Empire.

Secretary.

The activities of our Secretary—Mr. C. Stanton Crouch—have been many. Not only has he conducted the routine work of the Branch in his usual efficient manner, but the immense amount of extra work thrown upon him by the organization of our members on a war footing—work which it would have been almost impossible for the Council to have done without his capable and energetic help—cannot but meet with the full appreciation and thanks of our members. He was constantly in touch with the Medical Branch of the Defence Department, and all its demands were met promptly and fully. In addition to his ordinary duties he has for the past eighteen months voluntarily reported all meetings of the Branch; all his reports including those of the clinical meetings and of the highly technical discussions at the monthly meetings have given nothing but satisfaction to the Council.

Alcoholism.

A resolution was adopted by the Council affirming the desirability, from the point of view of example, of taking no spirituous liquor during the period of the war except on medical advice. This resolution, when laid before the Branch, was adopted. A circular was issued to all members urging them to set an example by adherence to the resolution.

Advertising.

An addendum with regard to advertising was made to the Ethical Rules. This was submitted to a meeting of mem-

bers of the Branch and adopted. On several occasions it was brought to the notice of the Council that some members had not conformed to the rule of conduct there laid down, but the Council has found little or no difficulty in inducing these members to observe the rules.

Referendum.

At a Special Meeting of the Branch to deal with the adoption of the Ethical Rules with regard to advertising, the question relating to the methods by which members might notify their intention of practising in a district was keenly discussed, and the Council decided that a referendum should be taken amongst its members so that it might obtain information to guide it in dealing with the question. There was not much interest taken, for, in reply to the question—

> "Are you in favour of the adoption by the Association of the following resolution, viz.:—'Any member of the Association either on commencing practice in a district, or subsequently, who may desire appointment as medical officer to a Friendly Society or a Miners' Lodge or any similar position, may apply for such appointment in the following terms':—'To the —— Friendly Society. Having commenced practice (or being in practice) as a medical man at ———, I desire appointment as one of the medical men available to your members. Signed, A.B.' 'Such application shall be unaccompanied by any testimonial or recommendation.'"

only 158 answers were received—126 for and 32 against. The Council therefore decided that, as so little interest appeared to be taken in the matter, no action should be taken.

Workers' Compensation Act.

Delegates of your Council had several conferences with the State Commissioner of Insurance relative to the amount of fees payable to the certifying medical practitioner. A material increase both as regards fees and mileage rates was obtained, and several anomalies were remedied.

Yarram Hospital.

The attempt to make the Yarram Hospital an intermediate one met with strenuous opposition from the Council. Official intimation has been received that the contemplated form of hospital has been abandoned. In consequence this hospital will be used only for the purpose for which public hospitals are established—to provide medical and surgical attendance for the indigent poor.

Meetings.

At the monthly meeting the following papers were read:—

"Surgical Observations in England, America and at the War."—Dr. Hamilton Russell.

"Discharging Ears and their Intracranial Complications."—Dr. W. Kent Hughes.

"Intracranial Extensions of Middle Ear Disease."—Dr. R. E. Shuter.

"Nervous Signs as an Aid to Diagnosis in Middle Ear Disease."—Dr. S. V. Sewell.

(*a*) "Relation of Adenoids as a Causative Factor in Suppuration of the Ears." (*b*) "Difficulties in Diagnosis of Intracranial Extension in Suppurative Otitis."—Dr. S. A. Ewing.

"Causation and Diagnosis of Suppurative Otitis."—Dr. E. R. Sawrey.

"Surgical Treatment of Duodenal Ulcer."—Dr. T. E. L. Lambert.

"Duodenal Ulcer from the Physician's Standpoint."—Dr. A. V. M. Anderson.

"Alcoholic Psychopathies."—Dr. C. G. Godfrey.

"Paranoia."—Dr. M. F. H. Gamble.

"Insanities other than General Paralysis of the Insane and Tabo-Paresis possibly due to undetected Syphilis."—Dr. W. A. T. Lind.

"Fluid Reactions and their Value, Diagnostic and Prognostic, in Psychiatry."—Dr. R. S. Callander.

"Lessons Learnt from Recent Surgical Experience with the Armies in France."—Dr. R. A. R. Wallace.

"Poisoning by Foul Air."—Dr. A. E. Taylor.

"Cerebro-Spinal Meningitis."—Dr. C. Alwyn Stewart

"Cerebro-Spinal Fever: an Analysis of 50 Cases."—Dr. N. H. Fairley and J. V. H. Guest in conjunction.

"Cerebro-Spinal Meningitis in Children."—Dr. N. J. Bullen.

"The Pathology and Bacteriology of Epidemic Cerebro-Spinal Meningitis."—Dr. Reg. Webster.

Clinical evenings were held at the Melbourne, Alfred, St. Vincent's, and Children's Hospitals, as well as at the Medical Society Hall. The following exhibited cases and specimens:—Drs. H. M. Hewlett, H. B. Devine, D. McM. Officer, Forbes McKenzie, G. S. Robinson, F. Hobill Cole, S. A. Ewing, D. Murray Morton, Julian Smith, John Murphy, W. J. Denehy, A. W. F. Noyes, E. Ryan, K. Hiller, E. R. Cordner, T. H. Boyd, T. E. L. Lambert, J. F. Wilkinson, W. R. Boyd, R. R. Stawell, Sydney Pern, W. Kent Hughes, Vera Scantlebury, A. V. M. Anderson, Herman Lawrence, G. W. Armstrong, R. H. Russell, H. Laurie, W. S. Laurie, R. C. Brown, Fay Maclure, J. Kennedy, J. Newman Morris, H. Barry Thomson, J. M. Baxter, Alex. Lewers, L. S. Latham, F. A. Newman, A. Jeffreys Wood, A. N. McArthur, A. E. R. White, H. Douglas Stephens, Harvey Sutton, M. D. Silberberg, J. D. King Scott, N. J. Bullen, and Reg. Webster.

Demonstrations were also given of cinematograph films by Messrs. Pathé Frères; methods for recognition of mental defects by Mr. S. D. Porteus; and apparatus for combating poisonous gases by Dr. A. E. Taylor.

On behalf of the Council,

C. STANTON CROUCH,

Secretary.

Librarians' Report.

Through the Editor of *The Medical Journal of Australia* we are getting a proportion of the periodicals received in exchange.

Up to the present about twenty Journals that were received prior to the amalgamation have failed to come to hand; these were not in much demand at the Library. On the other hand, we are receiving twelve additional good Journals. Thirty-eight volumes of current literature, nine volumes selected from a submitted list, and a number of periodicals required to complete the Library sets were also received from the Council of the New South Wales Branch of the B.M.A. Other donations were received from the following:—

Dr. A. V. M. Anderson, 14 vols. of General Literature.
Dr. Alex. Lewers, 8 vols. of General Literature.
Dr. J. D. King Scott, a number of periodicals to complete sets.
Dr. Konrad Hiller, a number of periodicals.

Members desirous of publishing articles and reports of cases have long felt the want of some catalogue of periodical medical literature. An effort is being made to draw up such a catalogue and a list of the periodical journals in the Melbourne Public Library, Medical School Library, and the Library of the B.M.A., Melbourne, have been obtained, likewise a copy of Dr. Hall's book "Scientific Publications in Melbourne Libraries." In order to complete the work we would be glad if members taking journals other than those in common use would acquaint us with the titles so that they may be incorporated in the catalogue.

A. W. FINCH NOYES,
H. DOUGLAS STEPHENS, Hon. Librarians

Dr. Rosenberg pointed out that in one paragraph of the report, referring to the distribution of the War Organization circular, it would appear that there were 200 eligible non-members of the Association, and an endeavour should be made to get them into the Association. He also advocated the adoption generally of the scheme in existence at Richmond. He was now the fifth man who had left his practice for three weeks, and had served that time in one of the military camps. The practice of the absent member was being carried on by his colleagues, and there had been no friction whatever. By this arrangement the Richmond practitioners were able to supply continuously a medical man in camp. There was likely to be a greater shortage in the near future, and by some such simple arrangement members in other districts could stock the camps.

In reply, Dr. Honman pointed out that the circular referred to had been sent out to every reputable medical practitioner, regardless of the fact that he or she might have retired from practice or had never practised, or that the recipient might have been a lady doctor who had entered the bonds of matrimony. A large number also had gradu-

ated recently; these men were at the front. In regard to the Richmond scheme, it had been laid before every metropolitan subdivision except one during a personal visit of one or more members of the Council. It had also been adopted in Ballarat, Geelong and Bendigo.

Dr. J. W. Dunbar Hooper urged the in-coming Council to take steps to see that the relatives of those who had died while on camp duty should not be debarred from receiving compensation.

Dr. J. M. Baxter contended that the relatives of these men were entitled to compensation up to three years.

Dr. Honman said that he had an official letter from the Principal Medical Officer to the effect that as Captain Rothera was not attached to any unit, he was not entitled to compensation. The matter was now under consideration of a board.

The motion for the adoption of the report was carried.

Before reading his Presidential Address, Dr. Honman counselled members of the British Medical Association throughout Australasia to be more alive to dangers which were threatening them in certain places, and Parliaments in particular. In Victoria, when the Midwives' Bill was under discussion, a most virulent attack was made upon the Association. It was stated that the body was a huge trades' union, whose members boycotted all who were not within its ranks. This attack, made by a member high in the councils of the Friendly Societies, was taken in silence, and the Parliament passed a law taking the representation on the Board out of the hands of the Branch. In New South Wales an attempt had been made to open the door to medical men from countries where reciprocity was not allowed. Both in the Upper and Lower Houses there was the same virulent attack upon the Association, which must not be forgotten later on. In the New Zealand Parliament a proposal had been made that no medical man should refuse to meet another medical man in consultation, whether he was a reputable medical practitioner or not, provided a specified fee had been tendered. If he refused, his name should be struck off the rolls. It behoved members to stand united and to continue organization by divisions and subdivisions, so that a combined front could be presented to any attack, and so that it would be possible to insist on the adoption of the Common Form of Agreement and thus to obtain better conditions for carrying on the work of the profession. (Cheers.)

Dr. Honman then read his address as retiring President. The text of the address will be published in a subsequent issue.

Dr. A. L. Kenny proposed a vote of thanks to the retiring President. From his long experience he could say without fear of contradiction that no President had given so much time to the affairs of the Branch. He often wondered whether Dr. Honman had found time to attend to his private practice. One thing which distinguished his work was that he had had large experience in army matters in times of peace and in the South African war. He retained that memory, and profited by it in his administration of military questions, by which the profession had benefitted. The peaceful relations of the profession to the Defence Department should be placed to Dr. Honman's account alone. Members were also indebted to him in that, by his address, he had returned to the scientific side of the Association. The work of the Branch had become largely medico-political, and the view was gaining ground that its work was not so well carried out in regard to the scientific side as in regard to the medico-political side. He should be thanked for his interesting and scholarly address, and for directing the attention of members to the fact that the library of the Branch possessed such works of interest.

Some members who had served the Council faithfully had been displaced to make room for new. The Council recognized that it was good for organization to have new blood in its ranks; too often men were returned unopposed. It may have been that members were satisfied with the controlling body, or, possibly, members were not thoughtful for the interests of the Branch. There had been great interest in the election, and a record number of votes polled. To the retiring members the Branch was indebted for years of faithful work.

In seconding the vote of thanks, Dr. W. R. Boyd said that he could confirm all that Dr. Kenny had said; from being a near neighbour he could bear testimony to the amount of work undertaken by Dr. Honman, to the energy he had spent in the affairs of the Branch. He also wondered how much sleep he managed to get, to say nothing about the time left for earning a living. The scientific side of the Branch should be kept up. Before the amalgamation, the Medical Society of Victoria kept aloof of ethical and medico-political matters. The Branch should keep before it the fact that, first of all, it was a scientific body, and medico-political work should not crowd out the scientific.

The vote of thanks, being put to the meeting, was carried enthusiastically.

Dr. Honman, in thanking the members for the appreciation of his services, stated that at the present time the scientific side of medical work was suffering in all parts of the world. Everywhere there was a dearth of papers read. Some journals had been suspended, and in England the journals were getting smaller and smaller. That was only a temporary phase. The Branch would not lose sight of its *raison d'être*, but at the same time it was necessary to defend its members from outside attacks. Any reproach that they might be under he trusted would be removed in happier times.

Mr. J. V. M. Wood was elected Auditor for the year now closing.

Various matters were brought forward for the consideration of the incoming Council.

Dr. J. M. Baxter pointed out that there were two kinds of Convalescent Homes in existence for wounded soldiers; one established by the Government, with medical officers paid by the Government; the other under Government auspices and a lay committee, which appointed the medical man. He desired the Council to give a ruling as to whether or not medical men should consent to give their services gratuitously. He consented to lay the matter before the Council by letter. In the meantime, members were counselled not to undertake any obligations in the matter, except temporarily and provisionally.

Dr. C. J. Sabelberg desired a ruling as to whether or not a lodge doctor attending a patient for injury by negligence on the part of another should not charge ordinary fees, which could be recovered from the defendant in a subsequent lawsuit. The question had come before the court, but no decision had been given, the plaintiff having been non-suited on another issue.

Dr. D. E. Stewart pointed out that in *The Medical Journal of Australia*, under the heading of "Important Notice," there were a number of appointments which medical men were prohibited from accepting, but as regards Victoria there was a blank. He thought the Council should take notice of the existence of dispensaries, and insert such notices.

Dr. W. Ostermeyer strongly identified himself with the medico-political aspect of the work of the Branch. He differed from previous speakers, who considered the scientific side as of primary importance. When the Medical Society amalgamated with the Victorian Branch, it took the name of the latter body, and, consequently, it had to carry out its functions. Ethical matters previously dealt with by the Medical Defence Association had also been taken over. The Medical Society of Victoria had uniformly objected to dealing with matters connected with medical ethics. Had it faced them, the Branch would have been in a much stronger position than it was. Medico-political activity was of the first importance.

Dr. A. V. M. Anderson considered that the relative importance of the several activities of the Branch depended wholly on the personal point of view taken. Representative committees dealt with each activity, and much good work had been done during the past year.

Dr. Beattie Smith drew the attention of the Council to notices appearing in the public press of medical men in attendance on private patients.

Dr. Baxter drew attention to the blatant way in which the advertisements were worded. He referred more especially to notices in the country press, which were detrimental to those who would not stoop to such unethical conduct.

The Honorary Secretary pointed out that the Council had been legally advised that a charge must be laid before the Council could act as judge.

Dr. F. L. Davies thought that the Council should act on any information obtainable, and not exclusively on what had been brought officially before it.

Dr. Baxter hoped that the Council would take notice of the progress report that appeared in the daily press referring to patients in private hospitals.

Dr. F. E. Webb asked whether there was any rule dealing with newcomers to a district. Was a man entitled to start practice where he pleased? If a district could only support two men, could a third enter into competition with the established practitioners, with the result that none of the three could make a decent living?

There was a simultaneous affirmative reply from all members present.

Dr. Webb expressed his personal concurrence with this view.

A special meeting of the Victorian Branch was held at the Medical Society Hall, East Melbourne, on December 1, 1915, immediately preceding the annual meeting. Dr. A. Honman presided.

The meeting had been called to consider the amount of subscription to be paid by members who had not been registered by the Medical Board as legally qualified medical practitioners for more than two years. For some years the subscription of £1 11s. 6d. had scarcely covered the cost of the *British Medical Journal* and of the local *Australian Medical Journal*.

Dr. Honman explained that since the advent of *The Medical Journal of Australia* the outlay had risen to £2 1s. While 200 members were at the war, and the Federal journal was being supplied at a loss of 10s. 6d., the Finance Committee had found it necessary, for the present at least, to ask members to agree to raise the junior membership subscription to £2 2s.

Dr. A. L. Kenny proposed a formal motion to this effect, and pointed out that a similar membership did not exist in any other State.

Dr. Rosenberg put in a plea for the junior members, who were being sweated at the hospitals. Deducting £2 1s. from the £3 3s., the ordinary subscription, members were really paying 22s. a year to carry on the work of the Branch, and to prepare for the enforcement of a model agreement. In contrast to this, members of the Australian Workers' Union, a body of working men, paid £2 2s. He would prefer that the subscription of senior members be raised to £5 5s.

Dr. Jeffreys Wood suggested that the amendment of the rule should not be retrospective.

Dr. Baxter pointed out that, if it were not made retrospective it would not be worth while making an alteration from a financial point of view, as the majority of the fresh graduates would be leaving for the seat of war.

Dr. Howard reminded members that those who remained would be receiving £400 a year at the military hospitals, or would be drawing £10 10s. a week as *locum tenentes*.

Dr. Anderson pointed out that there was still another aspect of the matter. He was sure that junior members would like to pay what their membership cost.

The rule was thereupon amended as follows:—

> That the subscription for junior members elected after this annual meeting shall be £2 2s.

This was passed by an unanimous vote.

MEDICO-POLITICAL.

A meeting of the Council of the Victorian Branch was held at the Medical Society Hall, East Melbourne, on November 24, 1915, Dr. A. Honman (the President) in the chair.

The President reported that he had interviewed the Deputy Director-General of Medical Services in regard to the question of the control of invalids admitted to Base Hospitals from abroad or from camps. A memorandum entitled "The Instructions for the Control of Invalids, etc.," had been forwarded to the Council for its information.

It was resolved that the report be published in *The Medical Journal of Australia* for the information of the members of the Association throughout the Commonwealth.

The Minister for Defence has asked the President to convey to the Council his appreciation of the many services that the Council had rendered to his Department.

The President reported that the Commission appointed to consider and advise on the question of the outbreak of epidemic cerebro-spinal meningitis had practically completed its labours. He asked permission of the Council to be relieved of further attendance; a request which was granted.

It was decided that a motion should be proposed at the annual meeting on December 1, 1915, congratulating Dr. F. G. Meade on the findings of the Base Hospital Enquiry Commission, and expressing the confidence of the medical profession in his ability.

The Honorary Secretary was instructed to forward a letter of condolence from the Council to the widow of the late Dr. W. A. H. Barrett, of Skipton.

A hearty vote of thanks was accorded by the Council to Dr. Andrew Honman for the immense amount of valuable work he had accomplished for the Branch during the term of his office as President.

The following is the report of the President of the Branch referred to above. We hope to be in a position to publish the memorandum on the instructions for the control of invalids, etc., in the next issue, in order that the report may be intelligible.

> At my interview with Colonel Shepherd, D.G.M.S., I drew attention to some points that appeared to the Council worthy of further consideration in "The Instructions for the Control of Invalids, etc.," a copy of which was forwarded to the Council for its information:
>
> In reference to paragraph 1 (*b*) and the men coming under case (1), as these men were to be provided with medical attendance by arrangement with our members, I asked that the nature of the man's disability should be stated with the other particulars on the man's roll; this was agreed should be done.
>
> Section 2.—As there was some ambiguity in reference to the mode of dealing with the men of class (1) by the Medical Board, it was explained by Colonel Shepherd that the Medical Board was to deal with the case within fourteen days of notification, and that its decision need not be final.
>
> 2. (*b*) The authorities did not ask the medical man under whose care men in Class (2) and (3) might happen to be to take any responsibility, and only asked for their co-operation and assistance in letting the Department know when it considered that these men were fit for duty.
>
> Cases of fresh illness or accidents occurring amongst returned soldiers who had not been discharged or pensioned must be sent to military hospitals; otherwise they must make their own arrangements for attendance.
>
> Enlisted Soldiers.—In reference to the request to medical men to notify the military authorities when a man of this class came under their notice, the authorities did not ask our members to take any responsibilities; they only asked them to assist the Department to keep in touch with enlisted soldiers. Major Maguire stated that he found no scheme alike in any State to attend on returned soldiers, and he was endeavouring to make such alteration as to make them alike; as soon as he had done this he would submit it to the Branches and ask them as soon as they had considered it to submit it to the Federal Committee for general acceptance.

The Council of the New South Wales Branch has had under its consideration a letter dated October 25, 1915, from the Deputy Director-General of Medical Services, part of which has been published in *The Medical Journal of Australia*, at the request of the Council of the Victorian Branch (see November 5, 1915, p. 453). The text of the letter is as follows:—

> It is now provided that no "sick leave" is to be granted from any Military Camp. All men who fall sick in camp will be treated in Military Hospitals and not allowed to go to their homes for treatment.
>
> Where a man, who is at home on leave, falls sick, he is at once to report (if able) at the nearest Military Hospital for admission and treatment. If unfit to travel

he will be treated at his own expense, and no liability for medical expenses will be recognized by the Department.

Any such man must inform his Officer Commanding within 48 hours of his illness. A certificate from his own medical practitioner will not necessarily be accepted as a warrant for extension of leave. The Department reserves the right to send a Military Medical Officer to examine and report in each case. Any man failing to report his illness will be treated as absent without leave.

Medical practitioners are requested to assist the Department in keeping in touch with all such cases by notifying the Staff Officer for Invalids at District Headquarters of all cases of illness among men absent on leave that may come under their notice.

In regard to men who have returned from active service invalided, all such men are, on arrival, admitted to a Military General Hospital. They may then be granted a few days' leave (if fit to travel about) to see their friends and relatives. They will, if requiring treatment, be treated as Out-Patients of the Military Hospital, if close enough to attend. Men who live in the country may, after being examined by a Medical Board, be allowed to go home, and, if necessary, are sent to a member of the British Medical Association for treatment under the scheme adopted by the British Medical Association and the Department.

In reference to the latter scheme, the original provision was for six months' treatment. A ruling has now been given that such men will be paid for only three months after arrival in Australia, or till discharged as fit to earn their living, or awarded a pension, whichever event occurs soonest. In special cases, the three months' pay may be extended if the pension is not awarded. As a general thing, a pension should be awarded and payment started in three months or less.

In all cases where a pension is awarded, the responsibility of the Department for medical attendance ceases on the commencement of the payment of the pension.

The Council of the South Australia Branch has also considered this letter, and has addressed the following letter, dated November 26, 1915, to the Deputy Director-General of Medical Services in reply thereto:—

I beg herewith to acknowledge your letter of October 25th, 1915.

In regard to the latter part of your letter, *viz.*, treatment of men in their own homes after discharge from Military Hospital and not able to report when sick to Military Authorities. Our members are prepared to treat them for 25s. for three or six months, as the military may determine; provided that a notice is sent to the individual medical man by the State Military Authorities, that such man is returning to his district, and, in case of sudden illness, the doctor must report immediately to the State Authority, and receive an assurance that the man is a suitable one for treatment under this scheme.

A conference was held between the Military Authority, representatives of the South Australian Branch of the British Medical Association, representatives of the Australasian Trained Nurses' Association, and representatives of the Royal British Nurses' Association at Keswick, on November 23, 1915. The object of the conference was to devise a means of obtaining additional nurses for military duty. It was agreed that it would be advisable to make the 7th Australian General Hospital and the 3rd Auxiliary Hospital training schools for nurses, and that the time spent in these hospitals should be regarded as equivalent to the same time spent in the training schools attached to the civil hospitals. This scheme has the approval of the Council of both Nursing Associations. It was determined that a further conference should be held to discuss the details of the scheme. The representatives of the South Australian Branch of the British Medical Association were Dr. R. Brummit and Dr. A. Campbell Magarey.

The following have been nominated for election to the New South Wales Branch:—

Dr. Arnold L. Lance, Royal Alexandra Hospital, Camperdown.

Dr. George Cumming Byrne, "Houghton," Victoria Street, Burwood.

Dr. Samuel Joseph H. Morean, St. Andrew's College, Camperdown.

Dr. George Meston Duncan, Muttabutta.

Medical Societies.

THE OPHTHALMOLOGICAL SOCIETY OF NEW SOUTH WALES.

The quarterly meeting of the Ophthalmological Society of New South Wales was held in the Sydney Hospital on November 3, 1915, Dr. J. C. Halliday in the chair.

Dr. Gordon MacLeod mentioned a modification in the technique of *corneo-scleral trephining for glaucoma* that he had lately been employing. In speaking of the immense value of Elliot's work, he referred to the cardinal criticism that had been raised against it, that the further the trephine hole was advanced on the cornea, the thinner was its covering. He then reviewed the various methods of reversing Elliot's procedure of flap formation adopted by von Mende, Webster Fox and Dupuy Dutemps, all of whom separated the conjunctiva at the limbus, and discussed the limitations of these variations and the general criticism made by Elliot of all these methods.

It had occurred to him that the advantage of a more substantial conjunctival covering could be attained and the greater part of Elliot's objection removed if the site of union of the flap could be advanced well on the pupillary side of the trephine hole, and separated from it by a band of intact corneal epithelium.

With this object, a site for the union of the flap, which was formed in the Van Lint or Dupuy Dutemps manner, was prepared by denuding of its superficial layers a crescentic area of the cornea surrounding the trephine hole, leaving, however, a strip of intact cornea in the immediate vicinity of the latter, this being the essential point of the operation. The best dimensions for the intact and denuded areas, as well as some other details, would be more exactly determined by further experience.

The immediate results of the cases done had been sufficiently satisfactory to encourage him in continuing the method, and he hoped later to show some cases to the Society.

The advantages that this modification appeared to offer were:—

(1) The simplicity of the operation in the fact that the proposed site of the trephine hole was immediately in view.
(2) The trephine hole was provided with a substantial conjunctival covering.
(3) The site of the union of the flap was removed from the immediate neighbourhood of the trephine hole by the strip of intact corneal epithelium, and so the disadvantages of plastic tissue being brought into direct relation to the edge of the trephine hole was avoided.

Dr. Odillo Maher thanked Dr. MacLeod for his very interesting notes on this operation.

Dr. Jones considered it should afford better protection than with Elliot's operation. He was not quite satisfied with Elliot's operation, since the occurrence of late infection in a case in his practice. He said that he hoped that time would show that late infections were less frequent with this new operation. He had seen some very satisfactory results from this operation in the hands of Dr. MacLeod.

Dr. Temple-Smith expressed some disappointment with the results of Elliot's operation. He had had a case of late infection, and found it difficult to avoid formation of vesicles over trephine hole. He would try this new method at the first opportunity.

Dr. Guy Pockley asked Dr. MacLeod whether, in his opinion, there was any chance of the conjunctiva which had been drawn over the cornea developing into a pterygium-like growth.

Dr. MacLeod replied that he considered there was no risk of pterygium-like formation.

Dr. Halliday remarked that the technique seemed to be simpler.

A vote of thanks was given to Dr. MacLeod for his very interesting and suggestive demonstration.

Dr. F. Guy Antill Pockley exhibited a case of *filamentary keratitis*, on which he had previously read notes.

Dr. J. C. Halliday showed an interesting case of *persistent visible hyaloid canal* in a child.

Dr. Halliday also exhibited a case of *monocular* absolute *glaucoma* in the left eye, with 5 D. of myopia. No. P.L.; the sight had been failing for five years. The age of the patient was 27.

An interesting discussion followed on the treatment in cases where one eye was destroyed by glaucoma and the other eye was unaffected or only slightly affected.

Dr. Maher commented upon the unusual youth of the patient, and the comparatively unusual fact of primary glaucoma in a myopic eye. He had been very forcibly struck with the number of cases of blindness in one eye from glaucoma, while the other eye remained unaffected for many years. He cited one case of 20 years' standing.

Dr. Jones did not advocate any interference in the case shown, as the disease had been present in this eye for five years, without the other one becoming affected.

Dr. Kelly cited a case similar to Dr. Maher's.

To illustrate the difficulties of dealing with glaucoma, Dr. MacLeod cited a case with chronic glaucoma, eczema, chronic conjunctivitis, and intolerance to eserin.

Dr. E. Temple-Smith then read some extracts from an article by Priestley Smith in the *Ophthalmic Review*, on the subject of the usefulness and limitations of the Schiotz tonometer.

University Intelligence.

A meeting of the Council of the Adelaide University was held on November 28, 1915. The re-election of the Warden, Mr. F. Chapple, C.M.G., B.A., B.Sc.; of Mr. J. R. Fowler, M.A.; Mr. S. Talbot Smith, M.A., LL.B.; Dr. W. T. Hayward, and Professor E. C. Stirling, C.M.G., as members of the Council, and of Mr. T. Ainslie Caterer, B.A., as clerk, was announced.

A letter was read from the Institution of Civil Engineering, of London, to the effect that it had been resolved that the degree of Bachelor of Engineering of the Adelaide University would be recognized by the Institution.

The thanks of the Council were tendered to the various lecturers, and especially to Professor Henderson, in connexion with the extension lectures delivered during the year.

Letters of thanks were directed to the Board of the Public Library, Museum and Art Gallery, and to Miss Minchin, for the gift of portraits of Lord Justice Thesiger, Sir Joseph Chitty, Sir Robert J. Pillimore, the Right Honourable Henry Bouverie, Mr. W. Brand, M.P., and Lord Justice Brett.

The following awards were made:—

Arts.

Tinline Scholarship for History—L. A. Mander.

David Murray Scholarship for Classics—F. M. Burgess.

John Howard Clark Scholarship for English Language and Literature—Alan Rendell.

Roby Fletcher Prime for Logic and Psychology—Ian Buttrose and J. L. Power (equal).

Barr Smith Prize for Greek—J. L. Power.

Andrew Scott Prize for Latin—G. H. Pitt.

Science.

John Bagot Scholarship and Medals—Frank R. Dealy and Stephen L. Kessell (equal).

Law.

David Murray Scholarship for Theory of Law and Legislation—F. G. Hicks.

Medicine.

Elder Prize (first year)—H. L. Rayner.

Elder Prize (second year)—W. B. Shanasy and Colin Gurner (equal).

Dr. Davies Thomas Scholarship—J. B. Gillen.

Music, etc.

Public Examinations (Music) Scholarship—Practice: Kate Levasseur. Theory: Evelyn Ward.

Robert Whinham Prize for Elocution—Clair D. Simon and Ernest W. Knightley (equal).

Vital Statistics.

SOUTH AUSTRALIA.

The returns of the Government Statistician for the month of October, 1915, have been published in the *South Australian Government Gazette* of November 18, 1915. There were 918 births registered during the month. The estimated population on January 1, 1915, was given as 441,690. On this basis the birth-rate expressed as an annual birth-rate would be 24.9 per 1,000 of population. In October, 1910, it was 25.8. In October, 1913, it was 29.9, and in October, 1914, it was 29.4. The total number of births from January 1 to October 31, 1915, in the State, was 9,937.

During the month 373 deaths were recorded. This is equal to an annual death-rate of 10.13. In October, 1910, the equivalent annual death-rate was 10.3; in October, 1911, it was 9.5; in October, 1912, it was the same; in October, 1911, it was 11.6; and in October, 1914, it was 10.9. Of the 373 deaths 45, or 12%, affected children under one year of age. The infantile mortality works out at 49 per 1,000 births. One hundred and fifty-eight persons of 60 years or over died. This is equivalent to 42.4% of the total number of deaths. The deaths of individuals between the ages of 5 years and 60 years represented 42.3% of the total.

In regard to the causes of death, 65 were due to diseases of the cardio-vascular system, including 45 of organic diseases of the heart, 12 of cerebral hæmorrhage, and 8 of "other diseases of the circulatory system." Of the infective diseases, tuberculosis was the most common cause of death, 35 cases being recorded. There were 27 deaths due to pneumonia, 13 to meningitis, 7 to morbilli, 7 to diarrhœa and enteritis, 6 to bronchitis, 5 to diphtheria and croup, 3 to septicæmia, 2 to influenza, and 1 each to enteric fever, dysentery, and tetanus. There were 32 deaths from malignant disease. Bright's disease was responsible for 21 deaths. There were no deaths ascribed to puerperal septicæmia, and only one to puerperal hæmorrhage. Among the causes of death of infants premature birth is entered 12 times, congenital debility, icterus, etc., 5 times, congenital malformation 5 times, and other diseases peculiar to infancy twice.

The returns for Adelaide were given as usual in two tables, the first dealing with all the births and deaths, and the second distinguishing the births and deaths in each ward of the city, and excluding the deaths of persons not usually resident in the city. From the latter table it appears that there were 91 births in a population of 43,438. This is equivalent to an annual birth-rate of 25.16 per 1,000 of population. The density of the population is given at 11.5 persons per acre.

There were 71 deaths, including 41 of males and 30 of females, which is equivalent to an annual death-rate of 19.56.

Tuberculosis appears to be the most common cause of death, 13 cases having been registered. In 9 of these cases the diseases was situated in the lungs. There were 7 deaths from organic diseases of the heart, and the same number from Bright's disease. Meningitis killed 5 persons, cancer 7, morbilli 3, diphtheria and pneumonia 3 each.

Naval and Military.

The appointment of Lieutenant-Colonel E. S. Stokes and of Lieutenant-Colonel G. Cuscaden to the position of Principal Medical Officer in the 2nd and 3rd Military Districts respectively has been announced in the Commonwealth *Gazette*, No. 152, of December 2, 1915, in the following terms:

> His Excellency the Governor-General, acting with the advice of the Federal Executive Council, has been pleased to approve of the following changes, etc., in connexion with the Australian Military Forces, *viz.*:—
>
> 2nd Military District.
>
> Lieutenant-Colonel E. S. Stokes, Army Medical Corps, Australian Imperial Force, to be Principal Medical Officer (provisionally), with pay

at the rate of £800 per annum, inclusive of all allowances except travelling, and with the temporary rank of Colonel whilst holding such appointment. Dated 1st December, 1915. Lieutenant-Colonel A. E. Perkins, D.S.O., Australian Army Medical Corps, vacates the appointment of Principal Medical Officer (temporarily). Dated 30th November, 1915.

3rd Military District.

Lieutenant-Colonel G. Cuscaden, Australian Army Medical Corps, from appointment of Principal Medical Officer (temporarily), to be Principal Medical Officer (provisionally), with pay at the rate of £800 per annum, inclusive of all allowances except travelling, and with the temporary rank of Colonel whilst holding such appointment. Dated 1st December, 1915.

The following appointments, etc., have been notified in the same issue of the *Gazette*:—

1st Military District.

Australian Army Medical Corps—

Captain I. Jackson, 4th (Wide Bay) Infantry, to be Staff Officer for Invalids (temporarly), with pay at the rate of £375 per annum, inclusive of all allowances except travelling, whilst holding such appointment. Dated 1st November, 1915.

Captain I. Jackson is seconded from appointment with 4th (Wide Bay) Infantry whilst holding the above appointment.

The appointment of Captain (temporay Major) L. P. Winterbotham as Staff Officer for Invalids is terminated. Dated 30th October, 1915.

2nd Military District.

Australian Army Medical Corps—

Major (temporary Lieutenant-Colonel) J. C. Robertson from appointment as Staff Officer for Invalids to be Medical Officer in charge Military Hospital, Victoria Barracks, Sydney, and Base Depôt of Medical Stores, with pay at rate of £650 per annum, inclusive of all allowances except travelling. Dated 30th October, 1915.

Army Medical Corps.

To be Captains—

Henry Alexander Hagen. Dated 24th September, 1915.

Henry Heber McWilliams. Dated 28th September, 1915.

To be Honorary Lieutenants—

Lieutenant E. T. Pascoe, from 8th Light Horse; Kendrick Valentine Blogg, Foxton William Hayley, Hugh Wright, and Arthur Marshall McIntosh. Dated 1st November, 1915.

Honorary Lieutenant W. H. A. Pye, Australian Army Medical Corps Reserve; Edwin Blomfield Gerard Riley, Henry Arthur Leslie Lambert, Theodore Alexander Deravin, Claude Hugh Silvester Ponsford, and William Richard Bailey. Dated 10th November, 1915.

Appointments Terminated.

The appointment of Major A. W. F. Noyes is terminated. Dated 1st September, 1915.

The appointment of Captain T. B. Lewers is terminated. Dated 3rd September, 1915.

The appointment of Captain A. R. Heupt is terminated. Dated 19th October, 1915.

Corrigendum.

To be Captain—

Honorary Captain A. Anderson, Australian Army Medical Corps Reserve. Dated 1st May, 1915. (This cancels the notification respecting this officer which appeared on page 1213 of *Commonwealth of Australia Gazette*, No. 61, of 26th June, 1915.)

The following promotions have appeared in the District Order, No. 122, of the 2nd Military District:—

To be Majors (provisionally)—

Captain W. G. Forde, Army Medical Corps. Dated 1st September, 1915.

Captain W. F. Simmons, Army Medical Corps. Dated 1st September, 1915.

In the 117th casualty list, issued on November 29, 1915, the names of Captain P. A. Maplestone and of Captain R. W. Chambers are included among the list of "ill."

In the 118th list, issued on December 1, 1915, the following names also appear under the same heading. Colonel T. H. Fiaschi, Lieutenant-Colonel S. Jamieson, Captain C. F. Ross, Captain L. A. Hayward and Captain C. Medlyn.

An announcement was published in the Melbourne press on November 29, 1913, that Colonel Fetherstone, Director-General of Medical Services, is expected to reach Melbourne on December 28, 1915.

The following notice dealing with administration in connexion with the venereal isolation camp has been issued in the District Order, No. 121, of the 2nd Military District, under date November 30, 1915:—

4. Patients who are confined in a Venereal Isolation Camp are not to be considered as hospital cases, except when specially placed on a sick list by the Medical Officer. They will be under ordinary military discipline, and will perform all ordinary duties and fatigues as ordered.

The Medical Officer will place on the sick list all men who are unfit to be up and about, or whose progress to recovery will be affected by performing ordinary camp duties. Such men will be strictly confined to bed until fit for duties.

A report of the Sanitary Committee of the 2nd Military District, dealing with the conditions of the Liverpool Camp, and containing various recommendations in respect to the dust nuisance, the alcohol question, the venereal disease question, and other matters has been published in the Sydney newspapers. The Committee consists of Dr. R. T. Paton, Director-General of Public Health, Dr. W. G. Armstrong, and Dr. J. Burton Cleland, of the Department of Public Health, and Professor D. Welsh, of the Sydney University. We understand that this report was submitted as a confidential document to the Principal Medical Officer some months ago. It appears that the report was forwarded to Melbourne, in accordance with the military requirements. It is regrettable that the authority, instead of carrying out the recommendation of its expert advisers, should have been satisfied to pigeon-hole the document for a considerable time, and then to publish it before the reforms had been effected.

NEW ZEALAND NURSES ON MILITARY SERVICE.

The announcement has been made that Surgeon-General Henderson has approved the appointment of 125 additional nurses to the New Zealand Army Nursing Service. Ten of these nurses are required to replace the brave women who lost their lives when the transport *Marquette* was torpedoed. A further 25 will be detailed for duty at the New Zealand Hospital at Walten-on-Thames. The remainder, it is presumed, will be required for service in the Mediterranean, including those who will be attached to the nursing staff of the second hospital ship. All the nurses are fully trained.

Correspondence.

VENEREAL INFECTIONS IN SOLDIERS.

Sir,—I must protest against the cursory examination which soldiers receive before being sent to the venereal compounds attached to the various military encampments around Sydney.

Surely a man, before being branded with the stigma of gonorrhœa, should have the benefit of a bacteriological examination? This is not done as a routine measure, and I very much doubt whether it is employed at all.

I have had two cases lately of soldiers who "escaped" from the venereal compound a few days after they had been sent there. One had a simple balanitis, while in the other case only a microscopical amount of moisture could be squeezed out of the urethra. Bacteriological examination

failed to reveal the presence of gonococci, after the most careful search, yet both men had been told they had gonorrhœa. I gave them both polite notes to their medical officer, suggesting a bacteriological test. This was not made. One man was sent to Wilson Island, and might still have been having his pot. permang. irrigations if a kindly medical officer had not discharged him as "cured." Whether the mistake in the other case was eventually rectified I do not know, but the point is that such a gross blunder should never have been made. The state of mind of the relatives of these men (*e.g.*, wives, sisters or fiancées) on learning that they are in the venereal compound can well be imagined. To place an innocent man there is an absolutely criminal proceeding, and everything should be done to guard against such mistakes. Unfortunately, due care is not taken.

Other medical men have told me of similar cases, and complain that their patients are not given fair play, nor are their opinions treated with the ordinary professional courtesy which they are entitled to expect.

Yours, etc.,

JAMES HUGHES, M.B., Ch.M.

"Kimerree," Centennial Park,
December 1, 1915.

NURSES AND COUNTRY PRACTITIONERS.

Sir,—Country medical practitioners will first rub their eyes on reading the unprovoked, bitter and slanderous attack on their professional decency in the current number of the official organ of the A.T.N.A., and then demand some explanation of its appearance.

The attack is delivered *à propos* a discussion at the conference of delegates of local associations of the B.M.A. anent the registration of private country hospitals as training schools.

The article, after naïvely stating that the Council has nothing to gain or lose by such registration, goes on to picture "the result of the customary feud between rival practitioners of the district."

"It is to be expected that in such a hospital all the lectures except those given by the Matron should be delivered by the medical owner, so that every year we should have a batch of Dr. X's nurses exhibiting exclusively Dr. X's ideas—and we feel sure from what we know of medical feuds in the country that Dr. Y's nurses would have inculcated into them ideas diametrically opposite to the former."

The Matron, apparently, being a member of the A.T.N.A., will always do right, but the doctor, to get home on his colleague, will degrade his professional knowledge and subordinate his consideration of the lives and welfare of his patients to his animosity. That the statement of supposed facts is false is bad enough; that it should be made at all is an insult to an honourable body of men; but that it should appear as the considered opinion of the official journal of the A.T.N.A. makes this statement incredibly mischievous. Everyone knows that country medical men occasionally disagree personally, but the reflection that this ever interfered with their professional judgements or the treatment of their patients is absolutely unjustified. Since the advent of local association, and even before, whatever their personal differences may have been, the country profession has been distinguished for their unanimous and cordial co-operation in all matters of professional moment.

Yours, etc.,

EARLE PAGE.

South Grafton, November 30, 1915.

Proceedings of the Australasian Medical Boards.

NEW SOUTH WALES.

The Medical Board of New South Wales was occupied with the hearing of a disciplinary case on December 1 and 3, 1915. Dr. Edgar Robert St. John Caro, of Macquarie Street, Sydney, was adjudged guilty of infamous conduct in a professional respect, in that he had systematically sought to attract patients by employing agents to tout and solicit for and obtain patients, and the Board directed that his name be removed from the register of medical practitioners of New South Wales. A report of the evidence of the case will be published in a subsequent issue.

Diary for the Month.

Dec. 14.—Tasmanian Branch, B.M.A., Monthly and Council.
Dec. 15.—Victorian Branch, B.M.A., Clinical.
Dec. 17.—N.S.W. Branch, Ordinary.
Dec. 17.—Queensland Branch, B.M.A., Council.
Dec. 21.—N.S.W. Branch, Executive and Finance Committee; Ethics Committee.
Dec. 28.—Organization and Science Committee; Medical Politics Committee.
Jan. 11.—N.S.W. Branch, Council (Quarterly).

Important Notice.

Medical practitioners are requested not to apply for any appointment referred to in the following table, without having first communicated with the Honorary Secretary of the Branch named in the first column, or with the Medical Secretary of the British Medical Association, 429 Strand, London, W.C.

Branch.	APPOINTMENTS.
QUEENSLAND. (Hon. Sec. B.M.A. Building, Adelaide Street, Brisbane).	Brisbane United F.S. Institute.
WESTERN AUSTRALIA. (Hon. Sec. 230 St. George's Terrace, Perth).	Swan District Medical Officer. All Contract Practice Appointments in W.A
NEW SOUTH WALES. (Hon. Sec. 30-34 Elizabeth Street, Sydney).	Arncliffe F.S. Lodges. Australian Natives Association. Balmain United F.S. Dispensary. Burwood District F.S. Institute. Canterbury United F.S. Dispensary. Goulburn F.S. Association. Leichhardt and Petersham Dispensary. M.U. Oddfellows Med. Inst., Elizabeth Street, Sydney. Marrickville United Friendly Societies' Dispensary. Mullumbimby District Friendly Societies. N.S.W. Ambulance Association and Transport Brigade. N. Sydney United F.S. People's Prudential Benefit Society. Phœnix Mutual Provident Society. F.S. Lodges at Casino. F.S. Lodges at Lithgow. F.S. Lodges at Mudgee, (except A.H.C.G. & M.U.I.O.O.F.) F.S. Lodges at Orange. F.S. Lodges at Parramatta, Penrith, and Auburn. F.S. Lodges at Wellington. Newcastle Collieries— Killingworth. Seaham Nos. 1 and 2. West Wallsend.
SOUTH AUSTRALIA. (Hon. Sec. 3 North Terrace, Adelaide).	The F.S. Medical Assoc. Incorp., Adelaide.

EDITORIAL NOTICES.

Manuscripts forwarded to the office of this Journal cannot under any circumstances be returned.

Original articles forwarded for publication are understood to be offered to *The Medical Journal of Australia* alone, unless the contrary be stated.

All communications should be addressed to "The Editor," *The Medical Journal of Australia*, B.M.A. Building, 30-34 Elizabeth Street, Sydney, New South Wales.